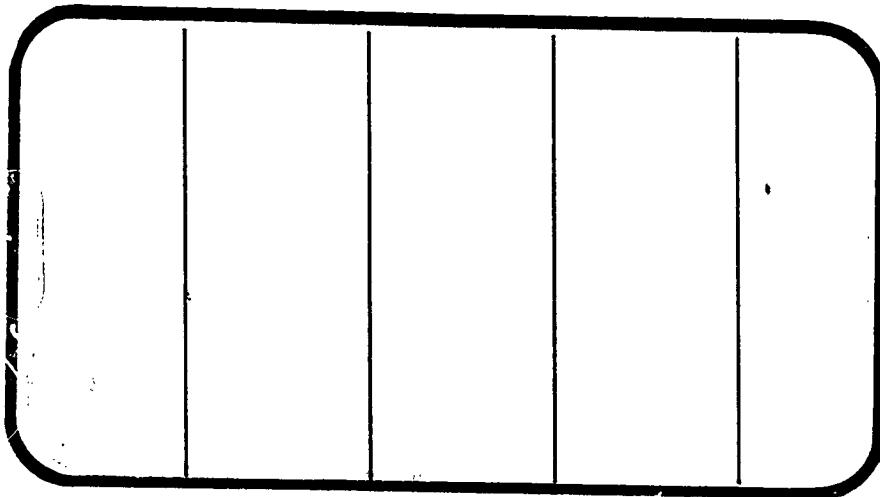




NATIONAL AERONAUTICS AND SPACE ADMINISTRATION

NASA CR-

147603



(NASA-CP-147603) TERMINAL AREA ENERGY
MANAGEMENT REGIME INVESTIGATIONS UTILIZING
AN 0.030-SCALE MODEL (47-0) OF THE SPACE
SHUTTLE VEHICLE ORBITER CONFIGURATION
140A/B/C/R IN THE AMES RESEARCH CENTER 11 X G3/18

N76-32237
HC \$28.25
Unclassified
49195

SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

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SPACE DIVISION  CHRYSLER
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July 1976

DMS-DR-2254
NASA CR-147,603

VOLUME 13 OF 13

TERMINAL AREA ENERGY MANAGEMENT
REGIME INVESTIGATIONS UTILIZING AN 0.030-SCALE
MODEL (47-0) OF THE SPACE SHUTTLE VEHICLE
ORBITER CONFIGURATION 140A/B/C/R IN THE
AMES RESEARCH CENTER 11 X 11 FOOT
TRANSONIC WIND TUNNEL (OA148)

by

P. J. Hawthorne
Rockwell International Space Division

Prepared under NASA Contract Number NAS9-13247

by

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Chrysler Corporation Space Division
New Orleans, La. 70189

for

Engineering Analysis Division

Johnson Space Center
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Houston, Texas

WIND TUNNEL TEST SPECIFICS:

Test Number: ARC 11-073
NASA Series Number: OA148
Model Number: 47-0
Test Dates: May 5 through May 17, 1975
Occupancy Hours: 220

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TERMINAL AREA ENERGY MANAGEMENT
REGIME INVESTIGATIONS UTILIZING AN 0.030-SCALE
MODEL (47-0) OF THE SPACE SHUTTLE VEHICLE
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ABSTRACT

This report documents data obtained in wind tunnel test OA148.

The objectives of the test series were to:

- 1) obtain pressure distributions, forces and moments over the vehicle
in the terminal area energy management (TAEM) and approach phases
of flight.
- 2) obtain elevon and rudder hinge moments in the TAEM and approach
phases of flight.
- 3) obtain body flap and elevon loads for verification of loads
balancing with integrated pressure distributions.
- 4) obtain pressure distributions near the short OMS pods in the high
subsonic, transonic and low supersonic Mach number regimes.

Testing was conducted over a Mach number range from 0.6 to 1.4 with
Reynolds number variations from 4.57×10^6 to 2.74×10^6 per foot. Model
angle-of-attack was varied from -4 to 16 degrees and angles of side slip
ranged from -8 to 8 degrees.

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FIGURE NUMBER	TITLE	CONDITIONS VARYING	PLOTTED COEFFICIENTS	PLOTTED SCHEDULE	PAGES
14	VERTICAL TAIL SPEEDBRAKE DEFLECTION 35 DEGREES	ALPHA, MACH Z/BV, BETA	F		1375-1442

PLOTTED COEFFICIENTS SCHEDULE:

- A) CY, CYN and CBL versus BETA
- B) CL, CA and CLM versus ALPHA
- C) CH0, CHF1, CHETOT and CHBF versus ALPHA
- D) CP versus X/LB
- E) CP versus X/CW
- F) CP versus X/CV

NOMENCLATURE

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
A_b	AB	total Orbiter base area, ft ²
A_i	Ai	area over which P_i acts, ft ²
A_{sb}	ASB	speed brake base area, ft ²
b	BREF, BW	Orbiter wing span, in
b_v	BV	vertical tail reference span, in
C_{A_u}	CAU	Orbiter uncorrected axial force coefficient
C_A	CA	Orbiter axial force coefficient with sting cavity adjusted to average base pressure
C_{AF}	CAF	Orbiter forebody axial force coefficient.
C_{AsC}	CASC	Orbiter sting cavity axial force coefficient.
C_{D_U}	CDU	Orbiter uncorrected drag coefficient
$C_{h_{bf}}$	CHBF	body flap hinge moment coefficient, about hinge line $X_0 = 1532.0$
$C_{h_{ei}}$	CHEI	inner elevon hinge moment coefficient, about hinge line $X_0 = 1387.0$
$C_{h_{eo}}$	CHEO	outer elevon hinge moment coefficient, about hinge line $X_0 = 1387.0$
$C_{H_{eTOT}}$	CHETOT	total right elevon hinge moment coefficient
C_{L_U}	CLU	Orbiter uncorrected lift coefficient
C_ℓ	CBL	Orbiter rolling moment coefficient, body axis system

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
C_m	CLM	Orbiter pitching moment coefficient with sting cavity adjusted to average base pressure, referenced to Orbiter MRC.
C_{m_u}	CLMU	Orbiter uncorrected pitching moment coefficient
C_{m_F}	CLMF	Orbiter forebody pitching moment coefficient referenced to orbiter MRC.
$C_{m_{sc}}$	CLMSC	Orbiter sting cavity pitching moment coefficient, referenced to Orbiter MRC
C_{N_u}	CNU	Orbiter uncorrected normal force coefficient
C_N	CN	Orbiter normal force coefficient with sting cavity adjusted to average base pressure
C_{N_F}	CNF	Orbiter forebody normal force coefficient
$C_{N_{sc}}$	CNSC	Orbiter sting cavity normal force coefficient
C_n	CYN	Orbiter yawing moment coefficient, body axis system
C_{pi}	CPI	surface tap pressure coefficient, port i, $(P_i - P_\infty)/q$
C_y	CY	Orbiter side force coefficient
$C_{[X][Y]}$	$C[X][Y]$	base area force and moment coefficients. The first subscript (post fix) designates the type of coefficient, the second the pressure tap and it's associated area. The symbolic vectors [X] and [Y] are defined below.
<u>[X]=</u>		
A	A	axial force
N	N	normal force
Y	Y	side force
m	LM	pitching moment
n	YN	yawing moment
&	BL	rolling moment

NOMENCLATURE (Continued)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
<u>[Y]=</u>		
1,2,3	1,2,3	areas associated with pressure taps
4,5,6	4,5,6	1 through 6 see figure 2b
sc	SC	sting cavity area
bf	BF	upper body flap area
l_b	LB	Orbiter reference body length, IML nose to $X_0 = 1528.3$, in.
l_{REF}	LREF	longitudinal reference length, Orbiter mean aerodynamic chord, in
	LU/DU	uncorrected lift to drag ratio, CLU/CDU
M	MACH	freestream Mach number
Φ	PHI	angular cylindrical coordinate position around Orbiter body - deg.
P_i	Pi	pressure at surface tap i, PSF
P_∞	P	freestream static pressure, PSF
P_t	PT	freestream total pressure, PSF
q	Q	freestream dynamic pressure, PSF
	RN/L	unit Reynolds number, million per foot
S	SREF	wing reference area, ft^2
T_t	TTR	freestream total temperature, $^{\circ}R$
X_{cp}	XCP/L	center of pressure location referred to l_b
X_0/L_0	X/LB	longitudinal location of body surface, fraction of body length

NOMENCLATURE (Concluded)

<u>Symbol</u>	<u>Plot Symbol</u>	<u>Definition</u>
X/C	X/CW	chordwise location on wing surface, fraction of local chord
X/C _V	X/CV	chordwise location on vertical tail, fraction of local chord
η_y	Z/BV	spanwise location on vertical tail, fraction of vertical tail span
η	2Y/BW	spanwise location on wing, fraction of semi span
X _{MRP}	XMRP	longitudinal location of moment reference point
X _T	XT	longitudinal moment transfer distance from Orbiter balance center to Orbiter MRC, in
Y _{MRP}	YMRP	lateral location of moment reference point
Z _T	ZT	vertical moment transfer distance from Orbiter balance center to Orbiter MRC, in
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
δ_{bf}	BDFLAP	body flap deflection, degrees
δ_{eL}	ELVN-L, L-ELVN	left elevon deflection, degrees
δ_{eR}	ELVN-R, R-ELVN	right elevon deflection, degrees
δ_r	RUDDER	rudder deflection, degrees
δ_{sb}	SPDBRK	speed brake deflection, degrees
Z _{MRP}	ZMRP	vertical location of moment reference point
	\$\$	mask character used to indicate all possible values for this test 01 through 85

REMARKS

During the course of the test it was necessary to replumb the scan-valves. The resultant time loss necessitated deleting the priority 4 runs which incorporated the use of the metric vertical tail.

Data obtained from pressure taps 184, 296 and 347 are suspect due to slow leaks noticed while leak checking individual model pressure taps.

Body flap hinge moment data for datasets RE8001 through RE8005 have a -15% drift while datasets RE8006 and RE8007 have a +10% drift due to data recording system errors. System checks during the remainder of the test indicate a system error of less than 4% for body flap hinge moment data.

Rolling moment data has an approximate -.003 bias in the current. The reason for this was not determined, but possible sources are fabrication tolerances and/or differential stiffness of the left and right elevon panels.

Distortion of the instrumented elevon shaft appears to have occurred around run 310 due to model assembly difficulties and the maximum loads encountered at these test conditions. A comparison of measured elevon deflection before and after the test with the nominal setting is presented below:

Elevon Panel	Nominal	Pre-Test	Post-Test
Inboard right	-10	-9° 36'	-8° 55'
	-4	-3° 34'	-2° 55'
	0	+0° 10'	+1° 02'
	4	+4° 26'	+4° 28'
	10	+10° 32'	+10° 39'
Outboard right	-10	-9° 36'	-8° 15'
	-4	-3° 34'	-2° 20'
	0	+0° 10'	+1° 05'
	4	+4° 26'	+3° 59'
	10	+10° 32'	+10° 18'

* Inboard only was measured but was the same as outboard panel (see Ref 2)

CONFIGURATION INVESTIGATED

The Rockwell International model 47-0 Space Shuttle Orbiter Vehicle was utilized in this test series. The model was originally constructed to -140A/B lines, but was modified prior to this test with the addition of the -140C OMS pods, six inch bevelled interpanel elevon gaps and uncovered RCS forward thruster parts. To denote these additions, the additional designations "C" (for -140C OMS pods) and "R" (for RCS thrusters) were added, and the slashes deleted for convenience on Table II (designated "-140 ABCR").

In data sets RE8069 to 085 the RCS thruster ports in the nose were filled reverting the configuration to -140A/B/C modified with body B₂₆.

The following nomenclature denotes the model components:

<u>Component</u>	<u>Description</u>
B ₂₆	140A/B fuselage (VL70-000140A, VL70000140B)
B ₇₀	140A/B fuselage (VL70-000140A, VL70-000145, VL70-000140B, VL70-000143A, VL70-000139) with RCS thruster parts (VL70-08501, VL70-08502, VL70-08296)
C ₉	140A/B basic canopy (VL70-000140A, VL70-000143A)
E ₄₄	140A/B elevons (VL70-000200, VL70-006089, VL70-006092) with six inch bevelled interpanel gaps, no flipper door
F ₉	140A/B body flap (VL70-000140B, VL70-000200)
M ₁₆	OMS-RCS pods for 140C Orbiter
N ₂₈	OMS basic nozzles
R ₅	basic Orbiter rudder (VL70-000146A, VL70-000095)
V ₈	basic Orbiter vertical tail (VL70-000140F, VL70-000146A)
W ₁₁₆	basic 140A/B wing (VL70-000140B, VL70-000200)

CONFIGURATIONS INVESTIGATED (Concluded)

Designated configurations are:

-140ABCR ≡ B₇₀ C₉ E₄₄ F₉ M₁₆ N₂₈ R₅ V₈ W₁₁₆

-140 ABC ≡ B₂₆ C₉ E₄₄ F₉ M₁₆ N₂₈ R₅ V₈ W₁₁₆

TEST FACILITY DESCRIPTION

The Ames Research Center Unitary Plan 11- by 11-Foot Transonic Wind Tunnel is a closed-circuit, air-medium, variable-density facility capable of attaining Mach numbers from 0.6 to 1.4 at Reynolds numbers from $1.7 \times 10^6/\text{ft}$ to $9.4 \times 10^6/\text{ft}$. The test section is 22 feet long, and models are installed on internal strain-gauge balances mounted to sting-type support systems.

Shadowgraph and Schlieren photographic equipment is available, and pressure transducer instrumentation is provided.

Tunnel operating temperature is 580°R. Extended high Reynolds number runs are restricted by power availability.

DATA REDUCTION

Standard NASA/Ames data reduction equations were used to reduce forces, moments, and pressures to coefficient form. Orbiter main balance force and moment coefficients were computed using the following equations:

<u>Symbol</u>	<u>Orbiter main balance measurement</u>
NF	Normal Force
AF	Axial Force
PM	Pitching Moment
YM	Yawing Moment
SF	Side Force
RM	Rolling Moment

$$C_{A_u} = AF / (q S) \quad C_{L_u} = C_{N_u} \cos \alpha - C_{A_u} \sin \alpha$$

$$C_{N_u} = NF / (q S) \quad C_{D_u} = C_{N_u} \sin \alpha + C_{A_u} \cos \alpha$$

$$C_Y = SF / (q S)$$

$$C_{m_u} = \frac{PM}{q Sc} + \frac{C_A \cdot Z_T}{c} - \frac{C_N \cdot X_T}{c}$$

$$C_x = \frac{R M}{q S_b} + \frac{C_Y \cdot Z_T}{b} \quad \text{Moment Transfer Distances}$$

$$X_T = 0.572 \text{ in.}$$

$$C_n = \frac{Y_M}{q S_b} - \frac{C_Y \cdot X_T}{b} \quad Y_T = 0$$

$$Z_T = 0.450 \text{ in.}$$

The Moment Reference Center about which the data was reduced is located at

Orbiter (Full Scale)

X_0	1076.68
Y_0	0
Z_0	375.00

Balance coefficients were grouped into datasets RE80\$\$.

DATA REDUCTION (Continued)

Hinge moments and hinge moment coefficients were computed using the following equations:

Elevon hinge moments (inboard and outboard).

$$HM_{eI} = (HM1 - HM2) (M1/D1) + HM1$$

$$HM_{eo} = (HM3 - HM4) (M3/D3) + HM3$$

where

HM_i = measured moment on strain gage i

D_1 = distance between gages 1 and 2, .49335 in.

D_3 = distance between gages 3 and 4, .45800 in.

M_1 = moment transfer distance for inboard elevon, .93825 in.

M_3 = moment transfer distance for outboard elevon, .92250 in.

Elevon hinge moment coefficients

$$\text{Inboard, } C_{HeI} = HM_{eI} / (q S_e c_e)$$

$$\text{Outboard, } C_{Heo} = HM_{eo} / (q S_e c_e)$$

$$\text{Total, } C_{HeTOT} = C_{HeI} + C_{Heo}$$

S_e = elevon reference area, 0.189 ft.²

c_e = elevon reference MAC, 2.721 in.

Body flap hinge moment coefficient

$$C_{Hbf} = HM_{bf} / (q S_{bf} c_{bf})$$

HM_{bf} = measured body flap hinge moment

S_{bf} = body flap reference area, 0.12834 ft.²

DATA REDUCTION (Continued)

c_{bf} = body flap reference MAC, 2.541 in.

Hinge moment coefficients are part of datasets RE8X\$\$.

Pressure coefficients for all model orifice pressure measurements were computed using this equation:

$$C_{P_i} = (P_i - P_\infty)/q$$

where P_i = pressure at model orifice i

P_∞ = tunnel static pressure

q = tunnel dynamic pressure

Other data reduction constants include:

S = wing reference area, 2.4210 ft.²

c = wing reference chord, 14.2443 in.

b = wing reference span, 28.1004 in.

After the data had been reduced to coefficient form by NASA/AMES,DMS interpolated it to nominal α 's and β 's. Then 2 types of base and sting cavity area coefficients were calculated. When they are applied 3 types of balance coefficient data exists. These can be distinguished by the last subscript (symbolic name) or postfix (mnemonic name). The key is given below

U ~ uncorrected coefficients.

~ coefficients with sting cavity pressure corrected to base pressure (without a suffix).

F ~ forebody coefficients with the base area pressure corrected to freestream pressure.

DATA REDUCTION (Continued)

Only the correction coefficients associated with base pressure tapes 1 through 4 were applied to the longitudinal orbiter coefficients.

Figure 2b illustrates the base area associated with each pressure tap. Alphabetic characters bf and sc designate body flap and sting cavity areas, respectively. Base area coefficient names have a numeric character which designates the pressure tap number. Base coefficients for vertical tail areas 5 and 6 were calculated but not applied to the total orbiter coefficients. Base area coefficient values are tabulated in the appendix. A detailed derivation of these coefficients follows. It is concluded by a matrix of base area geometric properties.

The orbiter sting cavity force and moment coefficients were computed as:

$$C_{A_{SC}} = \frac{(C_{p2} - C_{p1})}{S} A_1$$

$$C_{N_{SC}} = \frac{(C_{p2} - C_{p1})}{S} A_1 \tan 12.55^\circ$$

$$C_{m_{SC}} = C_{A_{SC}} \frac{z_t}{c} - C_{N_{SC}} \frac{x_{sc}}{c}$$

The orbiter force and moment coefficients corrected for the difference between balance cavity pressure and orbiter base pressure:

$$C_A = C_{A_u} - C_{A_{SC}}$$

$$C_N = C_{N_u} - C_{N_{SC}}$$

$$C_m = C_{m_u} - C_{m_{SC}}$$

These orbiter coefficients are part of datasets KE80\$\$.

DATA REDUCTION (Continued)

Orbiter base force and moment coefficients were calculated as follows:

Upper base area

$$C_{N2u} = -(C_{p2} A_{2u} \tan 16^\circ)/S$$

$$C_{A2u} = -(C_{p2} A_{2u})/S$$

$$C_{m2u} = C_{A2u} \frac{Z_{2u}}{c} - C_{N2u} \frac{X_{2u}}{c}$$

Lower base area

$$C_{N2l} = -(C_{p2} A_{2l} \tan 10^\circ)/S$$

$$C_{A2l} = -(C_{p2} A_{2l})/S$$

$$C_{m2l} = C_{A2l} \frac{Z_{2l}}{c} - C_{N2l} \frac{X_{2l}}{c}$$

Total base area, A_2

$$C_{N2} = C_{N2u} + C_{N2l}$$

$$C_{A2} = C_{A2u} + C_{A2l}$$

$$C_{m2} = C_{m2u} + C_{m2l}$$

OMS pod base area, A_3

(This assumes the surface is perpendicular to the orbiter X-axis)

$$C_{A3} = -(C_{p3} A_3)/S$$

$$C_{m3} = C_{A3} \frac{Z_3}{c}$$

OMS pod base area, A_4

(This assumes the surface is perpendicular to the orbiter X-axis)

DATA REDUCTION (Continued)

$$C_{A4} = -(C_{p4} A_4)/S$$

$$C_{m4} = C_{A4} \frac{Z_4}{c}$$

Coefficients for the above areas are grouped into datasets EE8D\$\$.

Upper surface of body flap

$$C_{A_{bf}} = \frac{-C_{p_{bf}} A_{bf}}{S} \sin (\delta_{bf} + 6.88^\circ)$$

$$C_{N_{bf}} = \frac{-C_{p_{bf}} A_{bf}}{S} \cos (\delta_{bf} + 6.88^\circ)$$

$$C_{m_{bf}} = \frac{C_{A_{bf}} Z_{bf}}{c} - \frac{C_{N_{bf}} X_{bf}}{c}$$

where:

$$C_{p_{bf}} = \frac{C_{p200} + C_{p201} + C_{p204} + C_{p205}}{4}$$

The orbiter force and moment coefficients adjusted to free stream pressure (forebody coefficients).

$$C_{A_F} = C_{A_u} - \left(\frac{-C_{p1} A_1}{S} + \sum_{i=2}^4 C_{A_i} + C_{A_{bf}} \right)$$

$$C_{N_F} = C_{N_u} - (C_{N_2} + C_{N_{bf}})$$

$$C_{m_F} = C_{m_u} - \left(\sum_{i=2}^4 C_{m_i} + C_{m_{bf}} \right)$$

These orbiter coefficients are part of datasets KE80\$\$.

Vertical tail "undercarriage" area, A_5

Top Segment:

$$C_{N5t} = (C_{p5} A_{5t} \tan 63.75^\circ)/S$$

DATA REDUCTION (Continued)

$$C_{A5t} = - (C_{p5} A_{5t})/S$$

$$C_{m5t} = C_{A5t} \frac{Z_{5t}}{c} - C_{N5t} \frac{X_{5t}}{c}$$

Middle Segment:

$$C_{N5m} = (C_{p5} A_{5m} \tan 26.1426^\circ)/S$$

$$C_{A5m} = - (C_{p5} A_{5m})/S$$

$$C_{m5m} = C_{A5m} \frac{Z_{5m}}{c} - C_{N5m} \frac{X_{5m}}{c}$$

Bottom Segment:

$$C_{N5b} = (C_{p5} A_{5b} \tan 21.94^\circ)/S$$

$$C_{A5b} = - (C_{p5} A_{5b})/S$$

$$C_{m5b} = C_{A5b} \frac{Z_{5b}}{c} - C_{N5b} \frac{X_{5b}}{c}$$

Total area, A_5 :

$$C_{N5} = C_{N5t} + C_{N5m} + C_{N5b}$$

$$C_{A5} = C_{A5t} + C_{A5m} + C_{A5b}$$

$$C_{M5} = C_{m5t} + C_{m5m} + C_{m5b}$$

Vertical Tail base area, A_6 :

Segment above rudder

$$C_{N6u} = (C_{p6} A_{6u} \tan 63.75^\circ)/S$$

$$C_{A6u} = (C_{p6} A_{6u})/S$$

$$C_{m6u} = C_{A6u} \frac{Z_{6u}}{c} - C_{N6u} \frac{X_{6u}}{c}$$

DATA REDUCTION (Continued)

Rudder/Speed brake base:

$$C_{A6\ell} = C_{p6} A_{6\ell} [\sin(\theta - 55.1667^\circ) \cos 55.1667^\circ + \cos(\theta - 55.1667^\circ) \sin 55.1667^\circ \cos(\delta r)]/S$$

$$C_{N6\ell} = C_{p6} A_{6\ell} [\sin(\theta - 55.1667^\circ) \sin 55.1667^\circ - \cos(\theta - 55.1667^\circ) \cos 55.1667^\circ \cos(\delta r)]/S$$

$$C_{Y6\ell} = C_{p6} A_{6\ell} \cos(\theta - 55.1667^\circ) \sin \delta r/S$$

$$C_{m6\ell} = [C_{A6\ell}(Z_{6\ell}) - C_{N6\ell}(X_{6\ell})]/c$$

$$C_{\ell 6\ell} = [C_{Y6\ell}(Z_{6\ell})]/b$$

$$C_{n6\ell} = -[C_{Y6\ell}(X_{6\ell})]/b$$

$$\theta = \tan^{-1} \left[\frac{5.456791 + .573209 \cos \left(\frac{\delta_{SB}}{2} \right)}{3.797715 - .823715 \cos \left(\frac{\delta_{SB}}{2} \right)} \right]$$

$$A_{6\ell} = A_{6\ell}/\sin \theta$$

Total area, A_6 :

$$C_{A6} = C_{A6u} + C_{A6\ell}$$

$$C_{N6} = C_{N6u} + C_{N6\ell}$$

$$C_{Y6} = C_{Y6\ell}$$

$$C_{m6} = C_{m6u} + C_{m6\ell}$$

$$C_{\ell 6} = C_{\ell 6\ell}$$

$$C_{n6} = C_{n6\ell}$$

Vertical tail area coefficient data are grouped into datasets GE8D\$\$.

BASE GEOMETRIC PROPERTIES MATRIX

Description	Sub-script	Area A - ft. ²	Distance between Centroid and MRC vertical Z - in.	longitudinal X - in.
Sting cavity	sc	0.076699	0.45	12.199
Body flap upper surface	bf	0.128	- 2.64	13.659
Orbiter balance cavity	1	0.076699	0.45	12.199
Orbiter base orifice 2 lower	2L	0.133889	- 1.32	12.617
Orbiter base orifice 2 upper	2U	0.0818055	2.07	12.384
Lower OMS pod	3	0.030472	2.68	NA
Upper OMS pod	4	0.074166	3.63	NA
Vertical tail "undercarriage" bottom	5B	0.003565	4.612	12.395
Vertical tail "undercarriage" middle	5M	0.002610	5.336	14.079
Vertical tail "undercarriage" top	5T	0.000341	5.97	15.185
Vertical tail above rudder	6U	0.000798	12.656	18.482
Base area of speed brake	6L	Varies with speed brake deflection		

NOTES: Sting cavity and Orbiter balance cavity are synonymous.

NA - not applicable.

DATA REDUCTION (Continued)

δ_{sb}	$A6_x$, ft ²
0	0.0066036
25	0.0456000
35	0.0621000
55	0.0950800
85	0.1551400

$$x_{6l} = 15.045 + 1.442277 [1 - \cos (\delta_{sb}/2)]$$

$$z_{6l} = 9.755 + 0.501827 [1 - \cos (\delta_{sb}/2)]$$

Standard DMS loads cycle test procedures were used to process the OA148 pressure data. First numerous pressure distribution plots were released. Analysis of these produced bad pressure data list. This list is reproduced below:

DATA REDUCTION (Continued)

OA148 Bad Pressure Data

<u>Component</u>	<u>Dataset No.</u>	<u>Tap No.</u>	<u>B</u>	<u>a</u>
Fuselage (B)	1	143	4	-4
	1	148	4	-4
	1	150	4	-4
	1	152	4	-4
	1	186	4	-4
	1	187	4	-4
	1	189	4	-4
	1	191	4	-4
	1	193	4	-4
Lower Wing (L)	1 + 7	231	ALL	ALL
	1 + 85	290	ALL	ALL
	1	316	4	-4
	1	317	4	-4
	1	337	4	-4
	1	338	4	-4
	1	358	4	-4
	1	378	4	-4
	1	379	4	-4
	1	399	4	-4
Upper Wing (U)	1 + 7	247	ALL	ALL
	1	357	4	-4
Body Flap (F)	24	205	-4	12
Speed Brake (K)	1 + 85	822	ALL	ALL
Vertical Tail (V)	8	443	ALL	ALL
	ALL	1444	ALL	ALL
	79	1453	-4	-4
	79	1454	-4	-4

Note: Wind tunnel pressure data tabulated in the appendix have the original bad data values.

DATA REDUCTION (Continued)

These points were eliminated from further processing. The remaining data were interpolated to nominal alpha and beta values. Processing was completed with the release of a magnetic tape containing the final interpolated pressure coefficients.

This report contains plots and tabular listings for both force and pressure data. Plotted force data illustrates lateral-directional, longitudinal and hinge moment characteristics of the configuration tested. Plotted pressure data illustrates the effect of several control deflections and attitude changes on local pressure distributions. The multiple volume appendix contains a tabulated listing of the basic force and pressure data. Listing of the interpolated base area coefficients is also included. The plotted and tabulated data are arranged in the following manner:

VOLUME NO.	CONTENTS
1	Force data plots showing lateral-directional longitudinal and hinge moment characteristics.
2	Plots illustrating the effect of control surface deflections on fuselage, wing and vertical tail pressure distributions.

DATA REDUCTION (Concluded)

VOLUME NO.

CONTENTS

3

Tabulated Force Data

<u>Dataset</u>	<u>Data type</u>
RE80\$\$	source balance coefficients
RE8X\$\$	source hinge moment coefficients
RE8Y\$\$	source base pressure coefficients
KE80\$\$	interpolated balance coefficients adjusted for cavity pressure and forebody coefficients
EE8D\$\$	interpolated base and cavity area coefficients
FE8D\$\$	
GE8D\$\$	interpolated vertical tail base area coefficients

Tabulated Pressure Data

	<u>Component</u>	<u>Fourth Character*</u>	<u>Page</u>
4, 5	orbiter fuselage	B	1
6,7,8	lower wing	L	1271
9,10,11	upper wing	U	3147
12	upper body flap	F	5405
12	lower body flap	G	5774
13	speed brake	K	6143
13	vertical tail	V	6547

* The fourth character in each dataset identifier (i.e., XE8BXX, B for Fuselage) represents the individual component.

REFERENCES

1. SD75-SH-0106, "Pretest Information for OA148 of the 0.03-Scale 47-0 Pressure Loads Space Shuttle Model in the 11 x 11 Foot Leg of the NASA/ARC Unitary Plan Wind Tunnel," April 18, 1975.
2. MG-75-07-11, Rockwell International Corporation Internal Letter: "Model design Dimensional Varification Task 36: Elevon Deflection Angle Check of the 0.03-Scale SSV Model 47-0 (140A/B Configuration)". SAS/WTO/75-283, July 29, 1975.

TABLE I

-073

TABLE II.

TEST: OA 148

DATA SET RUN NUMBER COLLOCATION SUMMARY

DATE: 20ST TEST

DATA SET	TEST DATE	α												MACH NUMBERS	
		α	β	γ	δ	ϵ	ζ	η	ϑ	φ	ψ	χ			
Z38001	-140 ABCR	B	D	C	55	16.5	0	0	32	33	34	35	58	59	1.4
α 2		A	D						38	39	40	41	42		1.25
α 3		A	D						43	44	45	46	47		1.1
α 4		A	D						48	49	50	51	52		0.9
α 5		A	C						53	54	55	56	57		0.6
α 6	-140 ABCR	A	C	C	55	22.5	0	0	61	62	63	64			0.6
α 7		A	D						68	66	67	69	70		0.9
α 8	-140 ABCR	B	D	C	85	22.5	0	0	71	72	73	74	75	76	1.4
α 9		A	D						77	78	79	80	81		1.25
α 10		A	D						82	83	84	85	86		1.1
α 11		A	D						87	88	89	90	91		0.9
α 12		A	C						92	93	94	95	96		0.6

TEST RUN NUMBER

$$\begin{aligned} \frac{\partial \alpha}{\partial x} &= -1 & \frac{\partial \alpha}{\partial A} &= 8 & \frac{\partial \alpha}{\partial C} &= 1 \\ \frac{\partial \alpha}{\partial B} &= -4 & \frac{\partial \alpha}{\partial D} &= 4 & \frac{\partial \alpha}{\partial E} &= 1 \\ \frac{\partial \alpha}{\partial S} &= -4 & \frac{\partial \alpha}{\partial F} &= 0 & \frac{\partial \alpha}{\partial G} &= 1 \\ CB &= -8 & CO &= 4 & CP &= 8 \\ DB &= -4 & DO &= 4 & DP &= 8 \end{aligned}$$

COEFFICIENTS

IDVAP (1)

IDVAP (2)

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TABLE II - Continued.

TABLE II - CONTINUATION	DATE: POST-TEST
THREE HUNDRED CONVERSATION SUMMARY	

TEST: OA .48

TABLE II. - Continued.

DATA SET RUN NUMBER COLLATION SUMMARY

NIA = A - M S F C - M A F

TABLE II. - Continued.

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NASA-MSFC-MAF

TABLE II. - Continued.

TEST:	DATA SET IDENTIFIER	TEST NUMBER	TEST												TEST RUN NUMBER	MACH NUMBERS	
			1	2	3	4	5	6	7	8	9	10	11	12			
C-65	A-A-12-2	1	B-D	D	1C	55	16	3	4	-4	325	326	327	328	329	330	.4
C-66	A-A-12-2	2	D	D	D	D	D	D	D	D	331	332	333	334	335	336	.4
C-67	A-A-12-2	3	D	D	D	D	D	D	D	D	336	337	338	339	340	341	.4
C-68	A-A-12-2	4	D	D	D	D	D	D	D	D	341	342	343	344	345	346	.4
C-69	A-A-12-2	5	D	D	D	D	D	D	D	D	346	347	348	349	350	351	.4
C-70	A-A-12-2	6	D	D	D	D	D	D	D	D	351	352	353	354	355	356	.4
C-71	A-A-12-2	7	D	D	D	D	D	D	D	D	356	357	358	359	360	361	.4
C-72	A-A-12-2	8	D	D	D	D	D	D	D	D	362	363	364	365	366	367	.4
C-73	A-A-12-2	9	D	D	D	D	D	D	D	D	367	368	369	370	371	372	.4
C-74	A-A-12-2	10	D	D	D	D	D	D	D	D	372	373	374	375	376	377	.4
C-75	A-A-12-2	11	D	D	D	D	D	D	D	D	378	379	380	381	382	383	.4
C-76	A-A-12-2	12	D	D	D	D	D	D	D	D	384	385	386	387	388	389	.4
C-77	A-A-12-2	13	D	D	D	D	D	D	D	D	389	390	391	392	393	394	.4
C-78	A-A-12-2	14	D	D	D	D	D	D	D	D	395	396	397	398	399	400	.4
C-79	A-A-12-2	15	D	D	D	D	D	D	D	D	401	402	403	404	405	406	.4
C-80	A-A-12-2	16	D	D	D	D	D	D	D	D	406	407	408	409	410	411	.4
C-81	A-A-12-2	17	D	D	D	D	D	D	D	D	411	412	413	414	415	416	.4
C-82	A-A-12-2	18	D	D	D	D	D	D	D	D	416	417	418	419	420	421	.4
C-83	A-A-12-2	19	D	D	D	D	D	D	D	D	421	422	423	424	425	426	.4
C-84	A-A-12-2	20	D	D	D	D	D	D	D	D	426	427	428	429	430	431	.4
C-85	A-A-12-2	21	D	D	D	D	D	D	D	D	431	432	433	434	435	436	.4
C-86	A-A-12-2	22	D	D	D	D	D	D	D	D	436	437	438	439	440	441	.4
C-87	A-A-12-2	23	D	D	D	D	D	D	D	D	441	442	443	444	445	446	.4
C-88	A-A-12-2	24	D	D	D	D	D	D	D	D	446	447	448	449	450	451	.4
C-89	A-A-12-2	25	D	D	D	D	D	D	D	D	451	452	453	454	455	456	.4
C-90	A-A-12-2	26	D	D	D	D	D	D	D	D	456	457	458	459	460	461	.4
C-91	A-A-12-2	27	D	D	D	D	D	D	D	D	461	462	463	464	465	466	.4
C-92	A-A-12-2	28	D	D	D	D	D	D	D	D	466	467	468	469	470	471	.4
C-93	A-A-12-2	29	D	D	D	D	D	D	D	D	471	472	473	474	475	476	.4
C-94	A-A-12-2	30	D	D	D	D	D	D	D	D	476	477	478	479	480	481	.4
C-95	A-A-12-2	31	D	D	D	D	D	D	D	D	481	482	483	484	485	486	.4
C-96	A-A-12-2	32	D	D	D	D	D	D	D	D	486	487	488	489	490	491	.4
C-97	A-A-12-2	33	D	D	D	D	D	D	D	D	491	492	493	494	495	496	.4
C-98	A-A-12-2	34	D	D	D	D	D	D	D	D	496	497	498	499	500	501	.4
C-99	A-A-12-2	35	D	D	D	D	D	D	D	D	501	502	503	504	505	506	.4
C-100	A-A-12-2	36	D	D	D	D	D	D	D	D	506	507	508	509	510	511	.4
C-101	A-A-12-2	37	D	D	D	D	D	D	D	D	511	512	513	514	515	516	.4
C-102	A-A-12-2	38	D	D	D	D	D	D	D	D	516	517	518	519	520	521	.4
C-103	A-A-12-2	39	D	D	D	D	D	D	D	D	521	522	523	524	525	526	.4
C-104	A-A-12-2	40	D	D	D	D	D	D	D	D	526	527	528	529	530	531	.4
C-105	A-A-12-2	41	D	D	D	D	D	D	D	D	531	532	533	534	535	536	.4
C-106	A-A-12-2	42	D	D	D	D	D	D	D	D	536	537	538	539	540	541	.4
C-107	A-A-12-2	43	D	D	D	D	D	D	D	D	541	542	543	544	545	546	.4
C-108	A-A-12-2	44	D	D	D	D	D	D	D	D	546	547	548	549	550	551	.4
C-109	A-A-12-2	45	D	D	D	D	D	D	D	D	551	552	553	554	555	556	.4
C-110	A-A-12-2	46	D	D	D	D	D	D	D	D	556	557	558	559	560	561	.4
C-111	A-A-12-2	47	D	D	D	D	D	D	D	D	561	562	563	564	565	566	.4
C-112	A-A-12-2	48	D	D	D	D	D	D	D	D	566	567	568	569	570	571	.4
C-113	A-A-12-2	49	D	D	D	D	D	D	D	D	571	572	573	574	575	576	.4
C-114	A-A-12-2	50	D	D	D	D	D	D	D	D	576	577	578	579	580	581	.4
C-115	A-A-12-2	51	D	D	D	D	D	D	D	D	581	582	583	584	585	586	.4
C-116	A-A-12-2	52	D	D	D	D	D	D	D	D	586	587	588	589	590	591	.4
C-117	A-A-12-2	53	D	D	D	D	D	D	D	D	591	592	593	594	595	596	.4
C-118	A-A-12-2	54	D	D	D	D	D	D	D	D	596	597	598	599	600	601	.4
C-119	A-A-12-2	55	D	D	D	D	D	D	D	D	601	602	603	604	605	606	.4
C-120	A-A-12-2	56	D	D	D	D	D	D	D	D	606	607	608	609	610	611	.4
C-121	A-A-12-2	57	D	D	D	D	D	D	D	D	611	612	613	614	615	616	.4
C-122	A-A-12-2	58	D	D	D	D	D	D	D	D	616	617	618	619	620	621	.4
C-123	A-A-12-2	59	D	D	D	D	D	D	D	D	621	622	623	624	625	626	.4
C-124	A-A-12-2	60	D	D	D	D	D	D	D	D	626	627	628	629	630	631	.4
C-125	A-A-12-2	61	D	D	D	D	D	D	D	D	631	632	633	634	635	636	.4
C-126	A-A-12-2	62	D	D	D	D	D	D	D	D	636	637	638	639	640	641	.4
C-127	A-A-12-2	63	D	D	D	D	D	D	D	D	641	642	643	644	645	646	.4
C-128	A-A-12-2	64	D	D	D	D	D	D	D	D	646	647	648	649	650	651	.4
C-129	A-A-12-2	65	D	D	D	D	D	D	D	D	651	652	653	654	655	656	.4
C-130	A-A-12-2	66	D	D	D	D	D	D	D	D	656	657	658	659	660	661	.4
C-131	A-A-12-2	67	D	D	D	D	D	D	D	D	661	662	663	664	665	666	.4
C-132	A-A-12-2	68	D	D	D	D	D	D	D	D	666	667	668	669	670	671	.4
C-133	A-A-12-2	69	D	D	D	D	D	D	D	D	671	672	673	674	675	676	.4
C-134	A-A-12-2	70	D	D	D	D	D	D	D	D	676	677	678	679	680	681	.4
C-135	A-A-12-2	71	D	D	D	D	D	D	D	D	681	682	683	684	685	686	.4
C-136	A-A-12-2	72	D	D	D	D	D	D	D	D	686	687	688	689	690	691	.4
C-137	A-A-12-2	73	D	D	D	D	D	D	D	D	691	692	693	694	695	696	.4
C-138	A-A-12-2	74	D	D	D	D	D	D	D	D	696	697	698	699	700	701	.4
C-139	A-A-12-2	75	D	D	D	D	D	D	D	D	701	702	703	704	705	706	.4
C-140	A-A-12-2	76	D	D	D	D	D	D	D	D	706	707	708	709	710	711	.4
C-141	A-A-12-2	77	D	D	D	D	D	D	D	D	711	712	713	714	715	716	.4
C-142	A-A-12-2	78	D	D	D	D	D	D	D	D	716	717	718	719	720	721	.4
C-143	A-A-12-2	79	D	D	D	D	D	D	D	D	721	722	723	724	725	726	.4
C-144	A-A-12-2	80	D	D	D	D	D	D	D	D	726	727	728	729	730	731	.4
C-145	A-A-12-2	81	D	D	D	D	D	D	D	D	731	732	733	734	735	736	.4
C-14																	

TABLE II. - Concluded.

TEST: C-A-4-B	TEST NUMBER	CONFIGURATION	TEST RUN NUMBER COLLATION SUMMARY												DATE: POST TEST																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																										
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	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TABLE III
MODEL DIMENSIONAL DATA

MODEL COMPONENT : BODY - B₂₆

GENERAL DESCRIPTION : Configuration 110A/B orbiter fuselage

NOTE: B₂₆ is identical to B₂₄, except underside of fuselage has been refaired to accept W₁₁₆.

MODEL SCALE: 0.030

MODEL DRAWING: SS-A001A7, Release 12

DRAWING NUMBER : VL70-000143B, -000200, -000205, -006089, -000145.
VL70-000140A, -000140B

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OML: Fwd Sta. X ₀ =235), In.	1293.3	<u>38.799</u>
Length (IML: Fwd Sta X =238), In.	<u>1290.3</u>	<u>38.709</u>
Max Width (@ X ₀ = 1528.3), In.	<u>264.0</u>	<u>7.920</u>
Max Depth (@ X ₀ = 1464), In.	<u>250.0</u>	<u>7.500</u>
Fineness Ratio	<u>0.264</u>	<u>0.264</u>
Area - Ft ²		
Max. Cross-Sectional	<u>340.88</u>	<u>0.3068</u>
Planform		
Wetted		
Base		

TABLE III (Continued)

MODEL COMPONENT : BODY - B₇₀

GENERAL DESCRIPTION : Configuration 140A/B orbiter fuselage with forward fuselage RCS thruster ports, otherwise B₇₀ is identical to B₂₆.

MODEL SCALE: 0.030

DRAWING NUMBER: VL70-000140A, -000140B, -000143B, -000145, -000200,
VL70-000205, -006089, -008501, -008502, -008296

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OML: Fwd Sta X ₀ =235), In.	<u>1293.3</u>	<u>38.799</u>
Length (IML: Fwd Sta X ₀ =238), In.	<u>1290.3</u>	<u>38.709</u>
Max Width (@ X ₀ = 1528.3), In.	<u>264.0</u>	<u>7.920</u>
Max Depth (@ X ₀ = 1464), In.	<u>250.0</u>	<u>7.500</u>
Fineness Ratio	<u>0.264</u>	<u>0.264</u>
Area - Ft ²		
Max. Cross-Sectional	<u>340.88</u>	<u>0.3068</u>
Planform		
Wetted		
Base		

TABLE III (Cont'd)

MODEL COMPONENT : CANOPY - C₉

GENERAL DESCRIPTION : Configuration 3A, Canopy used with fuselage

B-46.

MODEL SCALE: 0.030

MODEL DWG: SS-A00147, Release 12

DRAWING NUMBER : VI70-000143A

DIMENSIONS :

FULL SCALE MODEL SCALE

Length ($X_0 = 434.643$ to 578), In. 143.357 4.301

Max Width (@ $X_0 = 513.127$), In. 152.412 4.572

Max Depth (@ $X_0 = 485.0$), In. 25.00 0.750

Fineness Ratio _____

Area _____

Max. Cross-Sectional _____

Planform _____

Wetted _____

Base _____

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OPTIONAL FAX

TABLE III (Cont'd)

MODEL COMPONENT ELEVON - E

GENERAL DESCRIPTION 6.0 In. E.S. caps machined into E₂₅ elevon.
Flapper doors centerbody pieces, and tipseals are not simulated.
(Data are for one of two sides.)

MODEL SCALE: 0.030

DRAWING NUMBER _____

DIMENSIONS	FULL SCALE	MODEL SCALE
Area - Ft ²	<u>210.0</u>	<u>0.189</u>
Span (equivalent) , In.	<u>349.2</u>	<u>10.476</u>
Inb'd equivalent chord, In.	<u>118.0</u>	<u>3.54</u>
Outb'd equivalent chord , In.	<u>55.19</u>	<u>1.656</u>
Ratio movable surface chord: total surface chord	_____	_____
At Inb'd equiv. chord	<u>0.2096</u>	<u>0.2096</u>
At Outb'd equiv. chord	<u>0.4004</u>	<u>0.4004</u>
Sweep Back Angles, degrees	_____	_____
Leading Edge	<u>0.00</u>	<u>0.00</u>
Trailing Edge	<u>-10.056</u>	<u>-10.056</u>
Hingeline (Product of Area & \bar{c}) ³	<u>0.0</u>	<u>0.0</u>
Area Moment (moment about leading edge), Ft ³	<u>1587.25</u>	<u>0.0429</u>
Mean Aerodynamic Chord, In.	<u>90.7</u>	<u>2.721</u>

TABLE III (Cont'd)

MODEL COMPONENT : BODY FLAP - F₉GENERAL DESCRIPTION : Configuration 140A/B MODEL SCALE: 0.030DRAWING NUMBER: VL70-000140B, -000200

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (Chord), In.	<u>84.7</u>	<u>2.541</u>
Max Width , In.	<u>262.308</u>	<u>7.869</u>
Max Depth , In.	<u>23.00</u>	<u>0.690</u>
Fineness Ratio	<u> </u>	<u> </u>
Area - Ft ²	<u> </u>	<u> </u>
Max. Cross-Sectional	<u> </u>	<u> </u>
Planform	<u>142.60</u>	<u>0.128</u>
Wetted	<u> </u>	<u> </u>
Base	<u>+1.90</u>	<u>0.0377</u>

TABLE III (Cont'd)

MODEL COMPONENT : OMS POD - M₁₆

GENERAL DESCRIPTION : Configuration 140C orbiter OMS pod - short pod.
External contour is to referenced drawings with 1/2" added to simulate
TPS.

MODEL SCALE: 0.015

DRAWING NUMBER: VL70-008401. -008410

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length (OMS Fwd Sta X ₀ = 1310.5), In.	<u>258.50</u>	<u>7.755</u>
Max Width (@ X ₀ = 1511), In.	<u>136.8</u>	<u>4.104</u>
Max Depth (@ X ₀ = 1511), In.	<u>74.70</u>	<u>2.241</u>
Fineness Ratio	<u>2.484</u>	<u>2.484</u>
Area - Ft ²		
Max. Cross-Sectional	<u>58.865</u>	<u>0.053</u>
Planform		
Wetted		
Base		

TABLE III (Cont'd)

OMS			
MODEL COMPONENT:	OMS NOZZLES - N ₂₈		
GENERAL DESCRIPTION:	Configuration 140A/B orbiter OMS nozzles.		
MODEL SCALE:	0.030		
DRAWING NUMBER:	VL70-000140A (Location), SS-A00106, Release 9 (Contour)		
DIMENSIONS:		FULL SCALE	MODEL SCALE
MACH NO.			
Length - In.			
Gimbal Point to Exit Plane			
Throat to Exit Plane			
Diameter - In.			
Exit			
Throat			
Inlet			
Area - ft ²			
Exit			
Throat			
Gimbal Point (Station) - In.			
Left Nozzle			
X ₀	1518.0	45.54	
Y ₀	- 88.0	- 2.64	
Z ₀	492.	14.76	
Right Nozzles			
X ₀	1518.0	45.54	
Y ₀	88.0	2.64	
Z ₀	492.0	14.76	
Null Position - Deg.			
Left Nozzle			
Pitch	15°49'	15°49'	
Yaw	12°17'	12°17'	
Right Nozzle			
Pitch	15°49'	15°49'	
Yaw	12°17'	12°17'	

TABLE III (Cont'd)

MODEL COMPONENT RUDDER - R₅
 GENERAL DESCRIPTION Configuration 140C orbiter rudder (identical to configuration 140A/B rudder).
 MODEL SCALE: 0.030
 DRAWING NUMBER VL70-000146B, -000095

DIMENSIONS	FULL SCALE	MODEL SCALE
Area - Ft ²	<u>100.15</u>	<u>0.090</u>
Span (equivalent), In.	<u>201.00</u>	<u>6.030</u>
Inb'd equivalent chord, In.	<u>91.585</u>	<u>2.748</u>
Outb'd equivalent chord, In.	<u>50.833</u>	<u>1.525</u>
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
At Outb'd equiv. chord	<u>0.400</u>	<u>0.400</u>
Sweep Back Angles, degrees		
Leading Edge	<u>34.83</u>	<u>34.83</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
Hingeline (Product of area & c)	<u>34.83</u>	<u>34.83</u>
Area Moment of center of pressure , Ft ³	<u>610.92</u>	<u>0.0165</u>
Mean Aerodynamic Chord, In.	<u>73.2</u>	<u>2.196</u>

TABLE III (Cont'd)

MODEL COMPONENT: VERTICAL - V₃

GENERAL DESCRIPTION: Configuration 140C orbiter vertical tail.

(Identical to configuration 140A/B vertical tail.)

MODEL SCALE: 0.030DRAWING NUMBER: VL70-000140C, -000146B

DIMENSIONS:

FULL SCALE MODEL SCALE

TOTAL DATA

Area (Theo) - Ft ²	<u>413.253</u>	<u>0.372</u>
Planform		
Span (Theo) - In.	<u>315.72</u>	<u>9.472</u>
Aspect Ratio	<u>1.675</u>	<u>1.675</u>
Rate of Taper	<u>0.507</u>	<u>0.507</u>
Taper Ratio	<u>0.404</u>	<u>0.404</u>
Sweep-Back Angles, Degrees.		
Leading Edge	<u>45.000</u>	<u>45.000</u>
Trailing Edge	<u>26.25</u>	<u>26.25</u>
0.25 Element Line	<u>41.13</u>	<u>41.13</u>

Chords:

Root (Theo) MP	<u>268.50</u>	<u>8.055</u>
Tip (Theo) MP	<u>108.47</u>	<u>3.251</u>
MAC	<u>199.81</u>	<u>5.994</u>
Fus. Sta. of .25 MAC	<u>1463.35</u>	<u>43.901</u>
W.P. of .25 MAC	<u>635.52</u>	<u>19.066</u>
B.L. of .25 MAC	<u>0.0</u>	<u>0.0</u>

Airfoil Section

Leading Wedge Angle - Deg.	<u>10.0</u>	<u>10.0</u>
Trailing Wedge Angle - Deg.	<u>14.92</u>	<u>14.92</u>
Leading Edge Radius	<u>2.0</u>	<u>0.060</u>

Void Area

13.17 0.0019

Blanketed Area

0.0 0.0REPRODUCIBILITY OF 1:1
ORIGINAL PAGE IS 1

TABLE III (Conl'd)

MODEL COMPONENT: WING-W₁₆

GENERAL DESCRIPTION: Configuration 4

NOTE: Identical to W₁₁, except airfoil thickness. Dihedral angle is along trailing edge of wing.

MODEL SCALE: 0.030

DWG. NO. VL70-000140A, -000200

TEST NO.

DIMENSIONS:

TOTAL DATAArea (Theo.) Ft²

Planform

Span (Theo) In.

Aspect Ratio

Rate of Taper

Taper Ratio

Dihedral Angle, degrees

Incidence Angle, degrees

Aerodynamic Twist, degrees

Sweep Back Angles, degrees

Leading Edge

Trailing Edge

0.25 Element Line

Chords:

Root (Theo) B.P.O.O.

Tip, (Theo) B.P.

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

EXPOSED DATAArea (Theo) Ft²

Span, (Theo) In. BP108

Aspect Ratio

Taper Ratio

Chords

Root BP108

Tip $\frac{1.00}{2}$ b

MAC

Fus. Sta. of .25 MAC

W.P. of .25 MAC

B.L. of .25 MAC

Airfoil Section (Rockwell Mod NASA)
XXXX-64

Data for (1) of (2) Sides

Leading Edge Cuff Ft²Planform Area Ft²

Leading Edge Intersects Fus M. L. @ Sta

Leading Edge Intersects Wing @ Sta

FULL-SCALEMODEL SCALE

2690.00	2.421
936.68	28.10
2.265	2.265
1.177	1.177
0.200	0.200
3.500	3.500
0.500	0.500
45.000	45.000
-10.056	-10.056
35.209	35.209
689.24	20.677
137.85	4.136
474.81	14.244
1136.83	34.105
290.58	8.717
182.13	5.161
1751.50	1.576
720.68	21.620
2.059	2.059
0.245	0.245
562.09	16.863
137.85	4.136
392.83	11.785
1185.98	35.579
295.30	8.829
251.77	7.555
0.113	0.113
0.120	0.120

113.18	0.102
100.0	15.0
1920.0	30.720

TABLE IV.

FUSELAGE PRESSURE TAP LOCATIONS -

DIAITER - IN.	ϕ	RADIAL LOCATION - DEGREES																						
		0	20	40	55	70	90	105	110	120	135	140	150	151	156	162	165	169	174	180	185	195	205	
Full 4 foot	0	7																						
2.35	7.05	0	7																					
2.45	7.35	0.08	8																					
2.65	7.95	0.23	11	12	13	14	15	16	17	18														
2.95	8.85	0.46		24	25	26	27	28	29	30														
3.25	9.75	0.70		36	37	38	39	40	41	42														
3.30	1.40	1.12	47	48	49	50	51	52	53	54														
44C	3.20	1.58																						
450	3.30	1.66	66	67	68	69	65	66	67	68														
465	3.95	1.77																						
500	5.00	2.24	75	76	77	78	79	80	81	82	83													
560	6.80	2.51	87	90	91	92	93	94																
625	8.75	3.01	98	99	100	101	102	103																
725	21.73	3.78	107	108	109	110	111	112																
880	24.40	4.97	116	117	118	119	120	121																
980	29.40	5.74	125	126																				
1080	32.40	6.52	128	129	130	131	132	133																
118C	37.40	7.29	137	138	139	140	141	142																

TABLE IV. - Concluded.

FUSELAGE PRESSURE TAP LOCATIONS

DEPARTER - IN.	Φ	RADIAL LOCATION ~ DEGREES																						
		0	20	40	55	70	80	105	110	120	135	140	150	151	155	162	165	169	174	180	195	205	215	225
Full nose	0																							
1245	37.35	7.79	45	46	47	48	49	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163
1320	39.0	82.1	57	57	58	59	60	160	161	162	163	164	164	164	164	164	164	164	164	164	164	164	164	164
1375	41.25	87.9	66	67	68	69	70	171	172	173	174	174	174	174	174	174	174	174	174	174	174	174	174	174
1430	42.9	92.1	72	77	78	79	80	181	182	183	184	184	184	184	184	184	184	184	184	184	184	184	184	184
1480	44.4	96.0	86	87	88	89	90	189	190	191	192	193	194	194	194	194	194	194	194	194	194	194	194	194
1530	45.9	99.9						196	197	198	199	199	199	199	199	199	199	199	199	199	199	199	199	199

TABLE V

χ_1	χ_2	LEFT WING PRESSURE TAP LOCATIONS										χ_3	χ_4	χ_5
		Taps										No.	%	Taps
235.110	73.0	208	209	2.0	211	212	213	214	215	216		9	9	
EOT	-	-	-	-	-	-	-	-	-	-		0		
235.140	73.0	210	210	220	220	221	222	223	224	225	226	227	228	229
EOT	2.5	2.5	2.5	230	231	232	233	234	235	236	237	238	239	240
364.170	73.0	242	243	244	245	246	247	248	249	250	251	252	253	254
EOT	256	257	258	259	260	261	262	263	264	265	266	267	268	269
367.220	73.0	270	271	271	272	273	274	275	276	277	278	279	280	281
EOT	283	284	285	286	287	288	289	290	291	292	293	294	295	296
374.250	70.0	297	298	300	313	302	303	304	305	306	307	308	309	310
EOT	311	312	313	314	315	316	317	318	319	320	321	322	323	324

TABLE V. - Concluded.

TABLE VI.

ORBITER VERTICAL TAIL & SPEED BRAKE
PRESSURE TAP LOCATIONS

VERTICAL (ft. above)		X/C_w													
Z_0	Scale	Z_0	Model	η_{1v}	0	.025	.05	.15	.30	.52	.685	.775	.90	.90	Σ^{no} Taps
550	6.5	553	430	.431	.432	.433	.434	.435	.436	.437	.438	.439	.440	.441	16
600	8.0	616	435	.439	.440	.441	.442	.443	.444	.445	.446	.447	.448	.449	8
645	10.35	659	447	.449	.450	.451	.452	.453	.454	.455	.456	.457	.458	.459	17
690	12.70	705	462	.464	.465	.466	.467	.468	.469	.470	.471	.472	.473	.474	20
720	21.6	735	477	.479	.481	.482	.483	.484	.485	.486	.487	.488	.489	.490	29
765	22.95	780	496	.498	.500	.502	.503	.505	.506	.508	.509	.510	.511	.512	32
792	23.76	795	496	.497	.498	.499	.500	.501	.502	.503	.504	.505	.506	.507	32

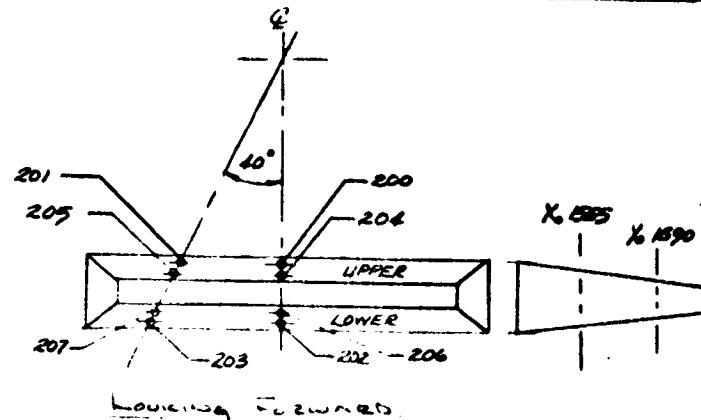
SPEED BRAKE (R/H)		$X/53Y$													
Z_0	Full Scale	Z_0 1/4 deg. Scale	7/58	1.0	.25	.40	.65	.90	.90	.90	.90				
600	18.0	110	801	802	803	804	805	806	807	808	809	810	5	5	5
630	18.9	1254	806	807	808	809	810	811	812	813	814	815	5	5	5
666	19.8	1407	811	812	813	814	815	816	817	818	819	820	5	5	5
690	20.7	1561	816	817	818	819	820	821	822	823	824	825	5	5	5
720	21.6	1706	821	822	823	824	825	826	827	828	829	830	5	5	5
750	22.5	1856	826	827	828	829	830	831	832	833	834	835	5	5	5

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L. P. RAY

TABLE VII.

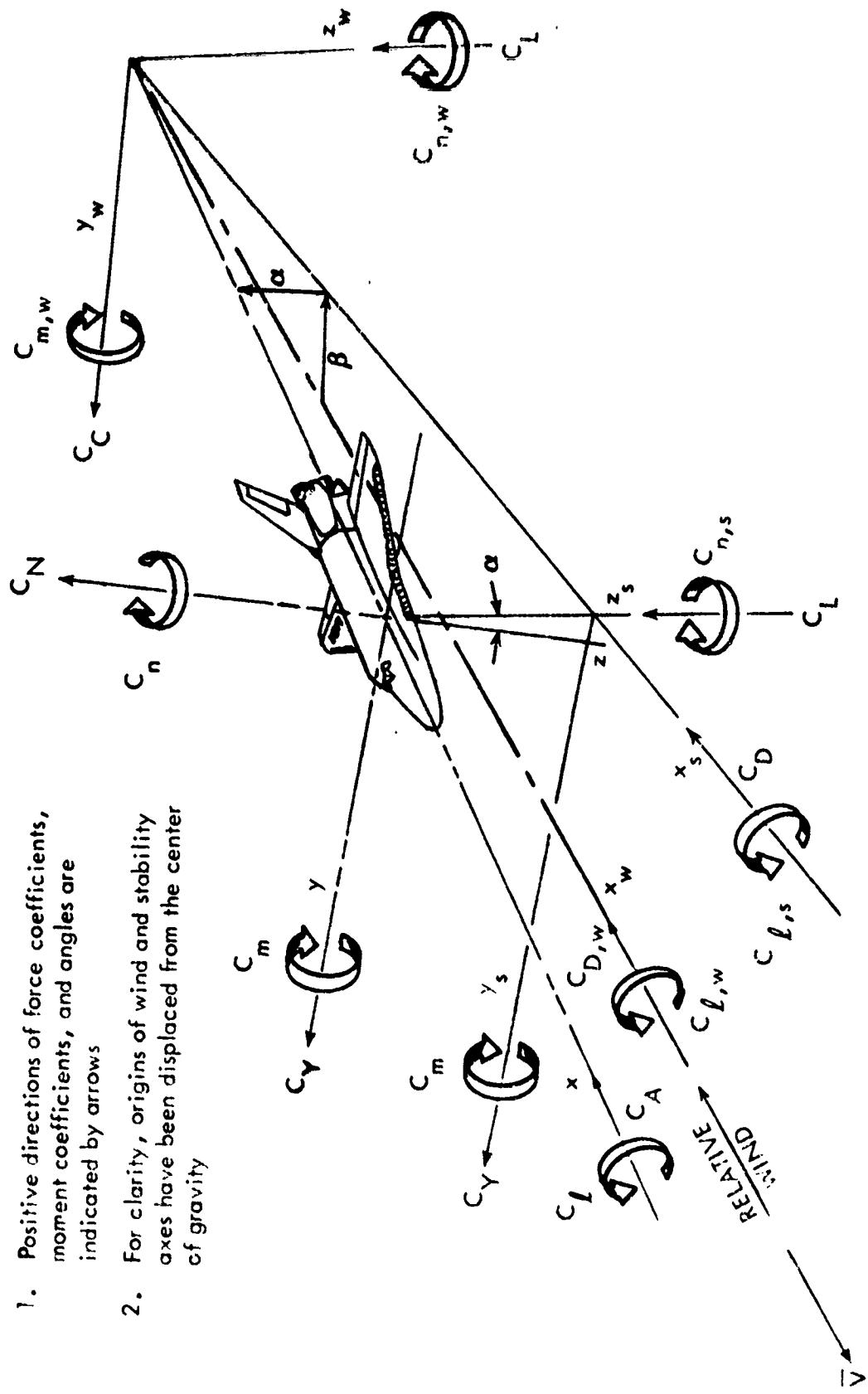
BODYFLAP PRESSURE TAP LOCATIONS

ORBITER-X ₀	MODEL SCALE	X ₀ /L ₀	Φ - DEGREES		No. TAPS	Σ No TAPS
FULL SCALE		X ₀ /L ₀	0	40		
1555U	46.65	1.018	200	201	2	2
1555L	46.65	1.018	202	203	2	4
1590U	47.70	1.046	204	205	2	6
1590L	47.70	1.046	206	207	2	8



Notes:

1. Positive directions of force coefficients, moment coefficients, and angles are indicated by arrows
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

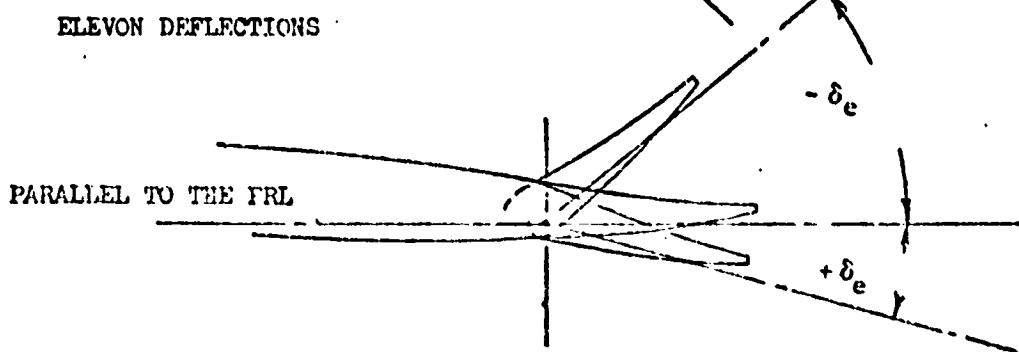
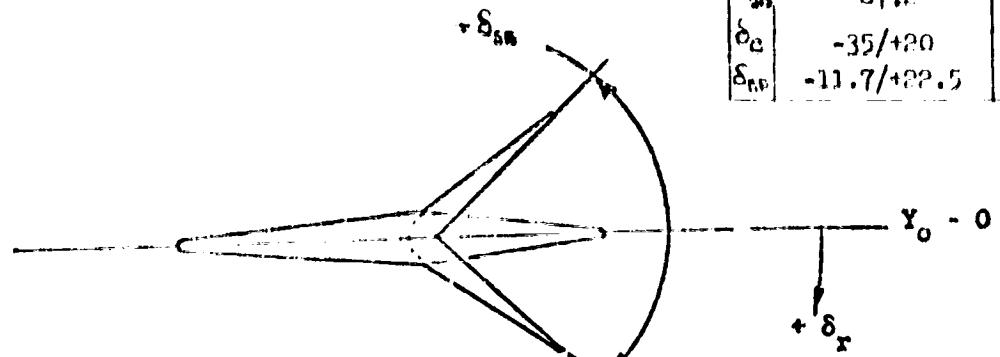


a. Orbiter Axis Systems

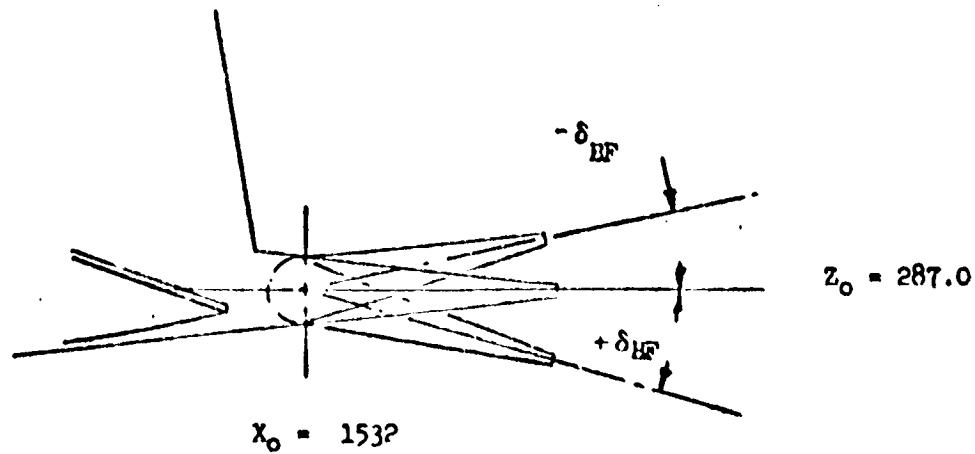
Figure 1. - Axis systems and sign conventions

RUDDER AND SPEED BRAKE DEFLECTIONS
(PARALLEL TO THE FRL)

Maximum Deflections		
Vehicle Position	Test CA14B	
δ_r	22.8	± 10
δ_{SB}	87.2	BS
δ_c	-35/+20	± 10
δ_{BF}	-11.7/+22.5	-11.7/+22.5

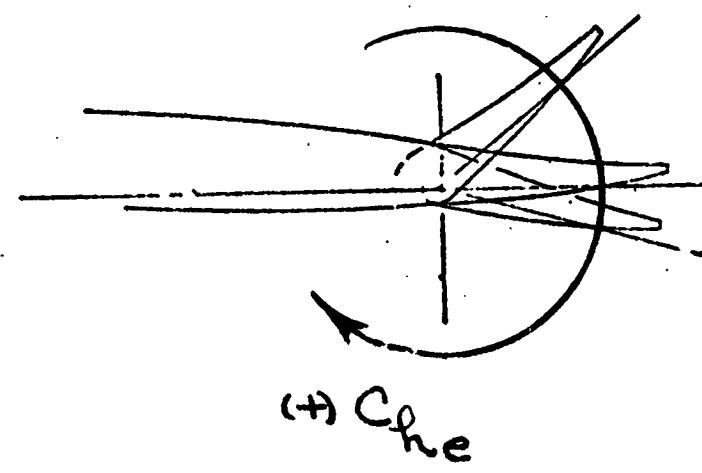


BODY FLAP DEFLECTIONS



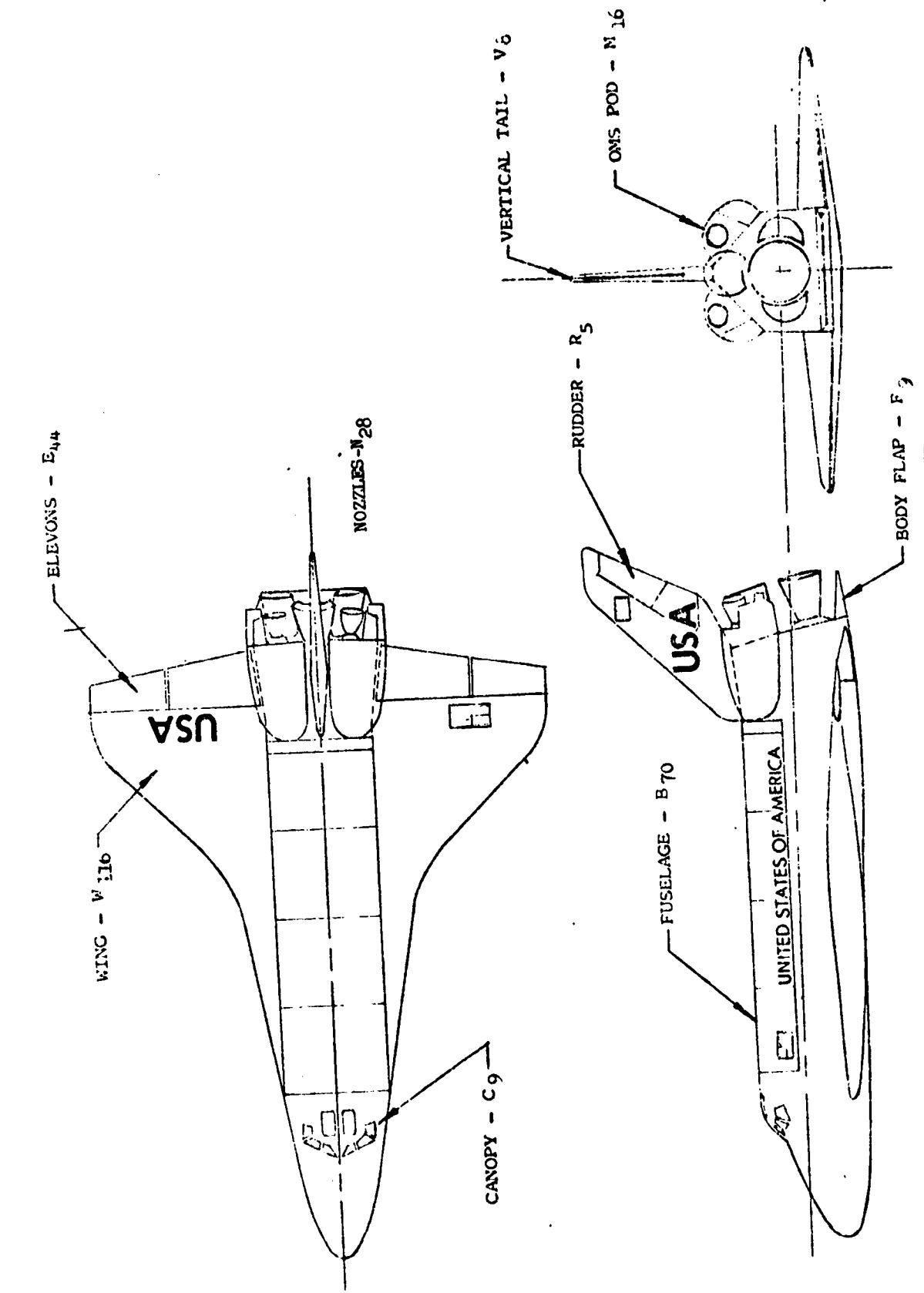
b. Definition of Angular Measurements

Figure 1. - Continued.



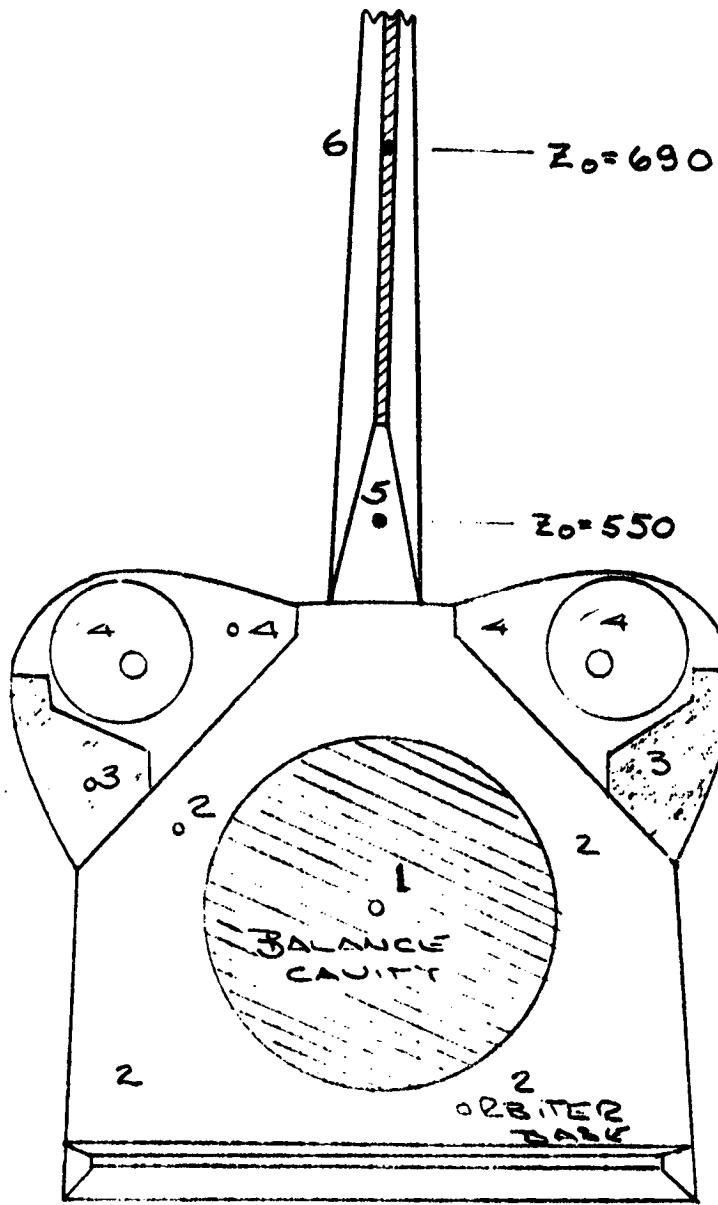
c. Elevon Hinge Moment Sign Convention

Figure 1. - Concluded.



a. Configuration - 140A/B/C/R

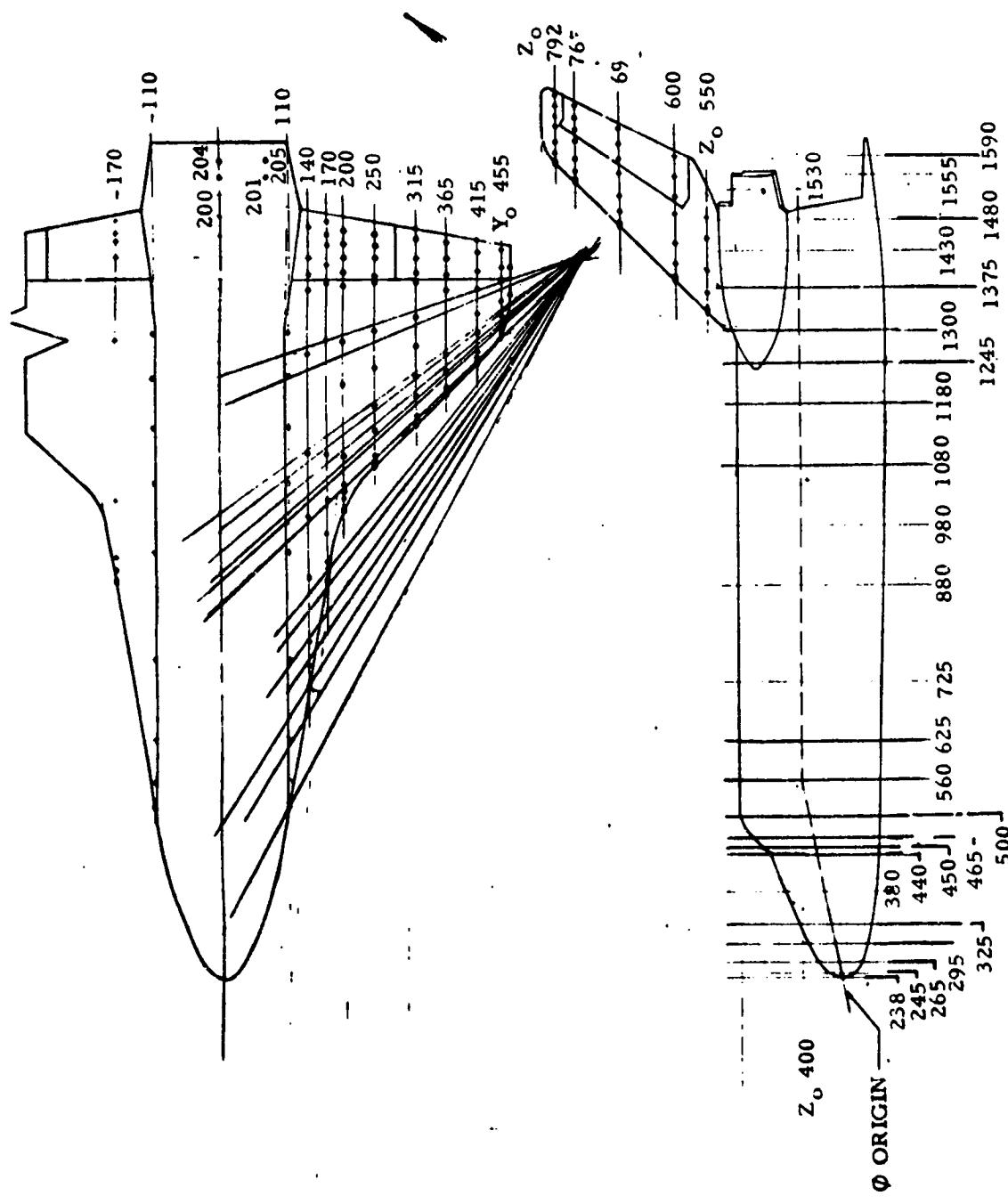
Figure 2. - Model sketches.



AREA NO.	PROJECTED AXIAL VALUE
A1	0.076699 ft ²
A2	0.215695 ft ²
A3	0.434072 ft ²
A4	0.074167 ft ²

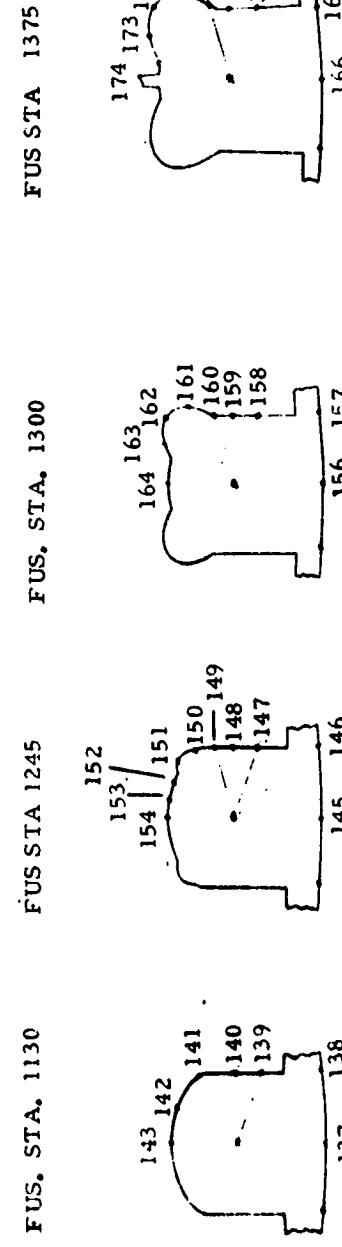
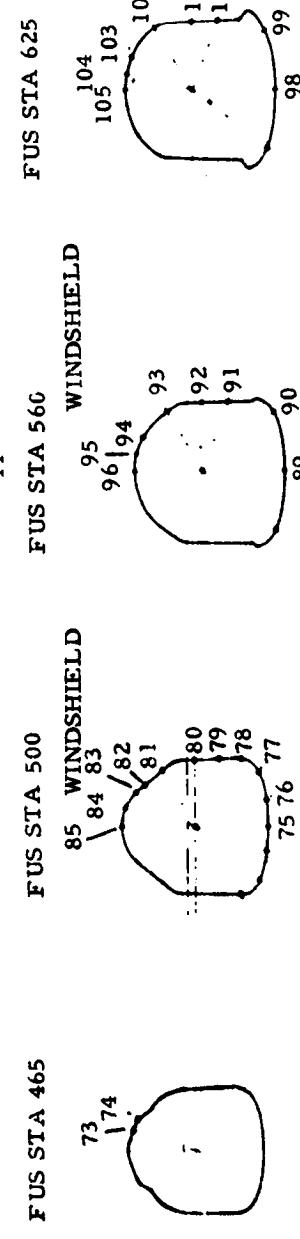
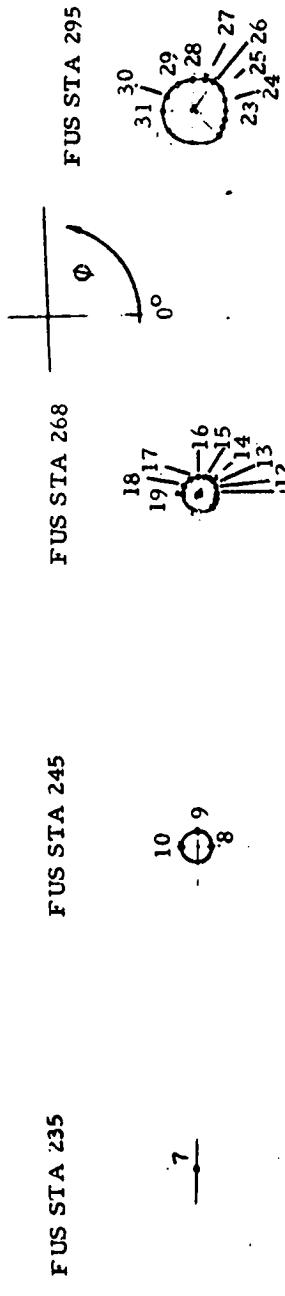
b. Base Pressure Taps and Areas

Figure 2. - Continued.



c. Fuselage, Vertical Tail, and Wing Pressure Tap Locations
Figure 2. - Continued.

NOTE: VIEW LOOKING AFT



c. Fuselage, Vertical Tail, and Wing Pressure Tap Locations
Figure 2. - Continued.

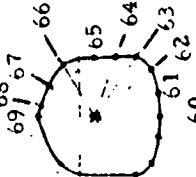
FUS STA 325



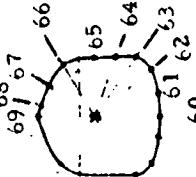
FUS STA 380



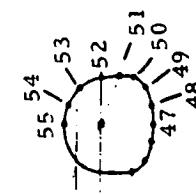
FUS STA 440



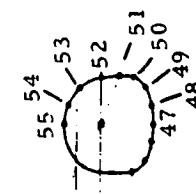
FUS STA 450



FUS STA 725

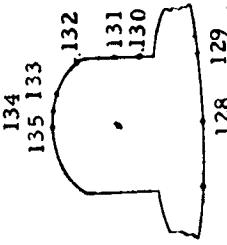


FUS STA 880

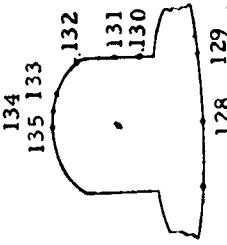


FUS STA 440

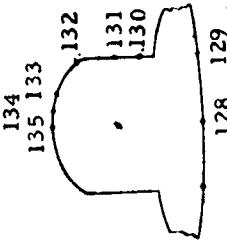
FUS STA 980



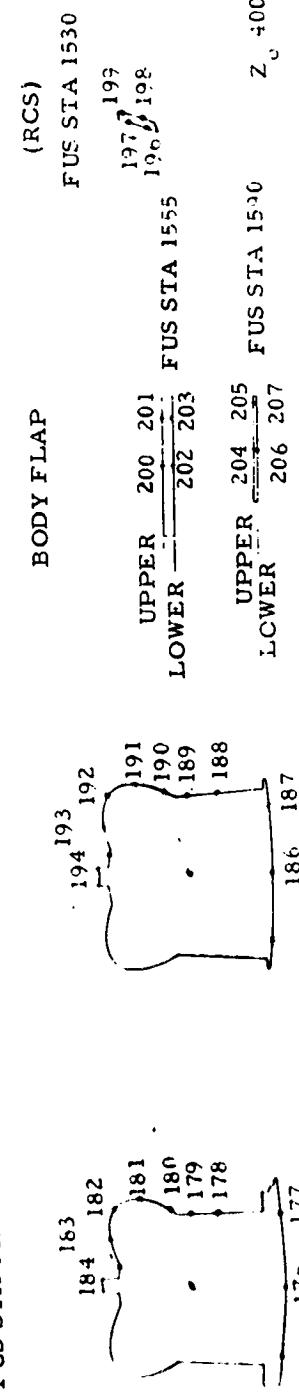
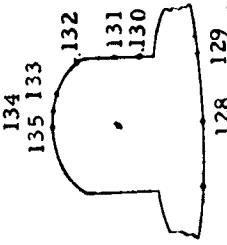
FUS STA 1080



FUS STA 1480

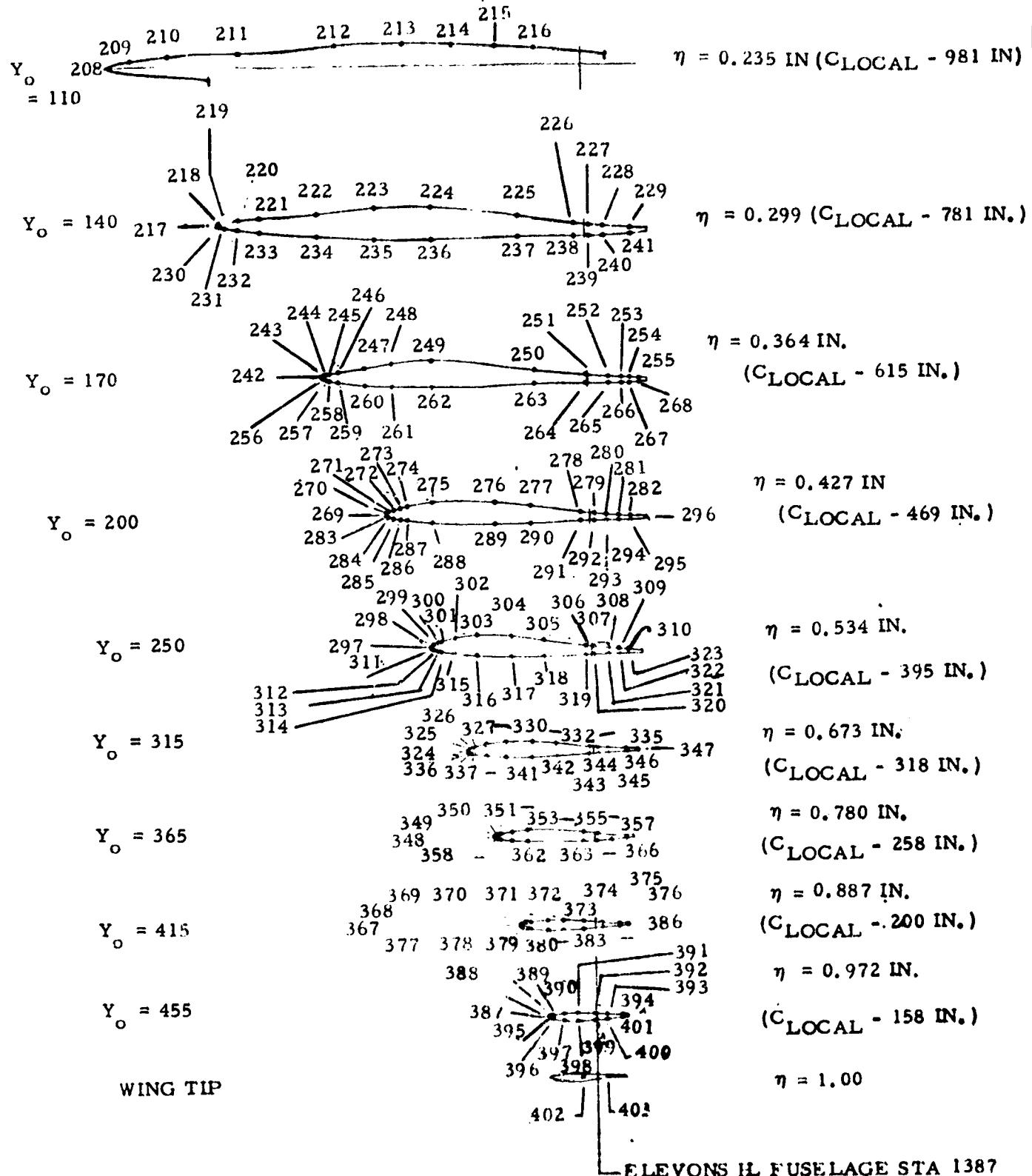


FUS STA 1430



c. Fuselage, Vertical Tail, and Wing Pressure Tap Locations
Figure 2. - Continued.

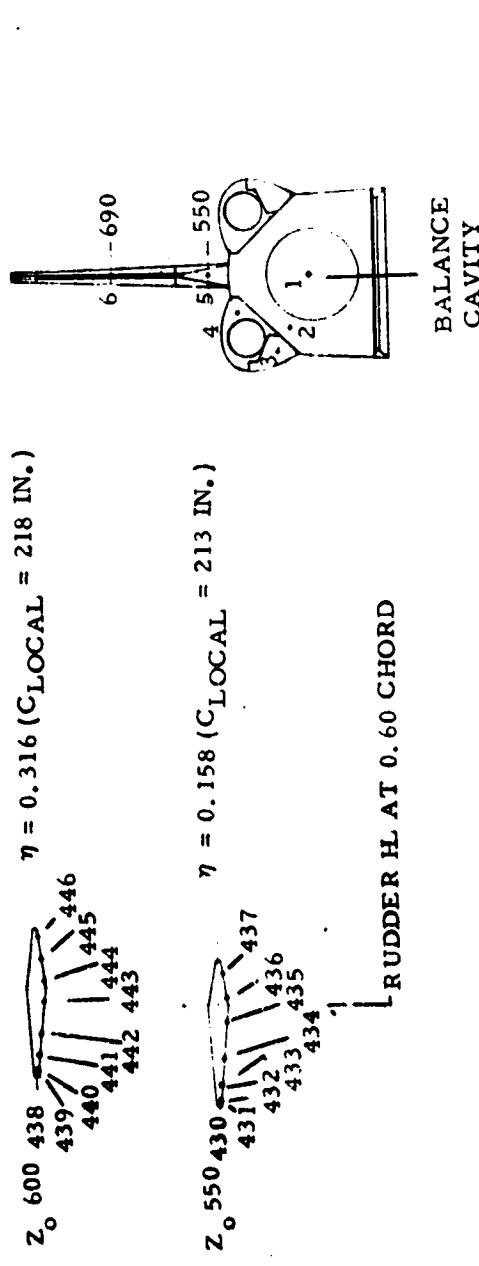
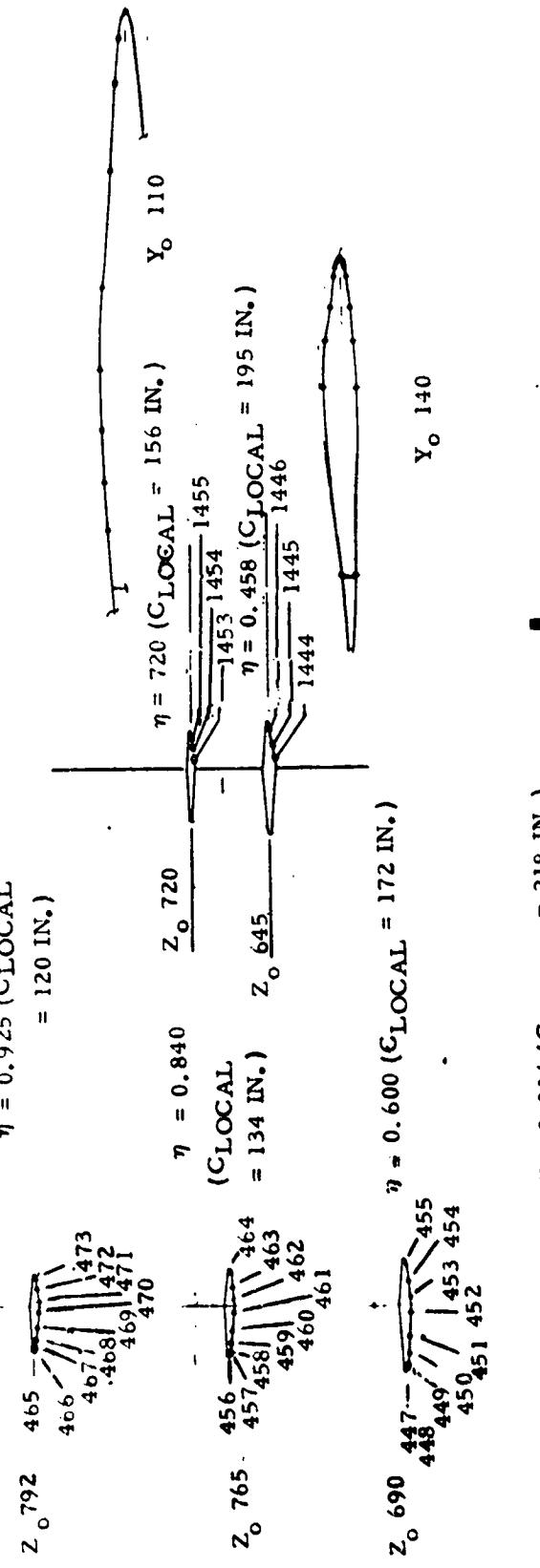
PRESSURE ORIFICE LOCATION OF LEFT WING PANEL



ELEVONS IL FUSELAGE STA 1387

c. Fuselage, Vertical Tail, and Wing Pressure Tap Locations
Figure 1 - continued.

PRESSURE ORIFICE OF RIGHT WING
PANEL



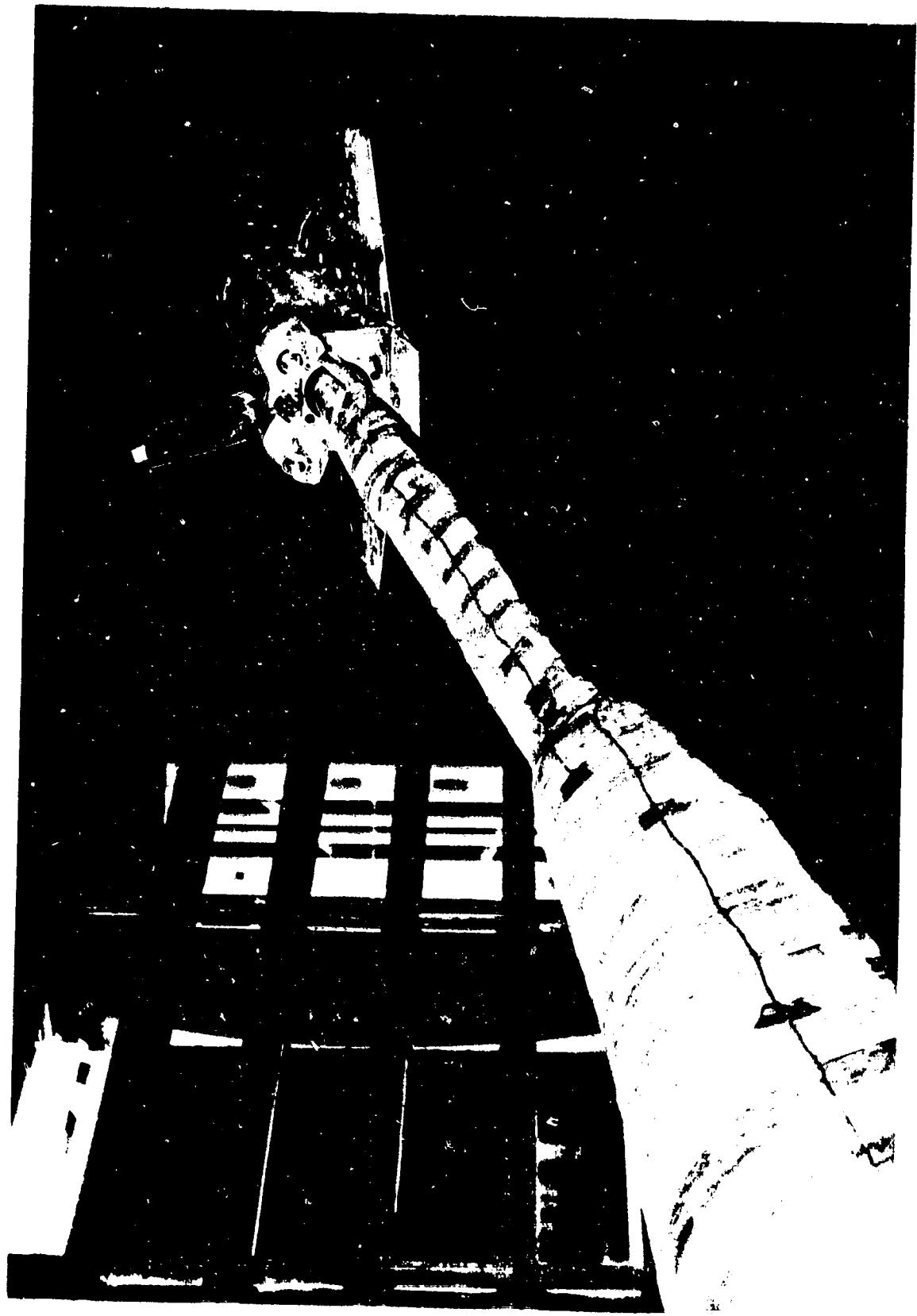
C. Fuselage, Vertical Tail, and Wing Pressure Tap Locations

Figure 2. - Concluded.



a. Three Quarter Front View of model 47-0 in the ARC 11 x 11 UPWT

Figure 3. - Model installation photographs.



b. Three Quarter Rear View of Model 47-0 in the ARC 11 x 11 UPWT

Figure 3. - Concluded.

APPENDIX

VOLUME NO.	CONTENTS	PAGES
3	TABULATED FORCE DATA	1-723
	TABULATED PRESSURE DATA	
<u>COMPONENT</u>		
4, 5	Orbiter fuselage	1-1270
6, 7, 8 (Note)	Lower wing	1271-3146
9, 10, 11 (Note)	Upper wing	3147- 5404
12	Upper body flap	5405-5773
12	Lower body flap	5774-6142
13	Speed brake	6143-6546
13	Vertical tail	6547-7114

Note: Data tabulated at $2Y/BW = .673$, $X/CW = .775, .850, .950$ & 1.00
were actually located at $2Y/BW = .641$, $X/CW = .775, .850, .950$
& 1.00 as shown in Table V on page 47.

DATE 1 → FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R SPEED BRAKE

PAGE 6143
(XEBK01) (13 AUG 75)

REFERENCE DATA

XPOS =	2530.0000	SC.FT.	XMRP =	1076.5800 IN. X0
ZPOS =	-174.2000	IN.	YMRP =	.0000 IN. Y0
ZREF =	935.0000	IN.	ZMRP =	375.0000 IN. Z0

SCALE = .0300

ALPHA : 1) = -4.093 BETA : 1) = -3.981 MACH = 1.3933

SECTION : LEFT HAND INSIDE DEPENDENT VARIABLE CP

Z:R: .3170 .4120 .5070 .6020 .6970 .7920

ALPHA : 1) = -.089 BETA : 2) = .154 MACH = 1.3933

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z:R: .3170 .4120 .5070 .6020 .6970 .7920

X/C : .723 -.6273 -.5313 -.5915 -.5995 -.6059 -.5573

.737 -.5659 -.5132 -.5937 -.5993 -.5927 -.5559

.821 -.6152 -.5373 -.5925 -.6043 -.5809 -.5535

.987 -.6159 -.6193 -.5052 -.6121 -.5647 -.5552

.993 -.6123 -.6123 -.6124 -.6141 -.5804 -.5463

ALPHA : 1) = -4.093 BETA : 2) = .154 MACH = 1.3933

SECTION : LEFT HAND INSIDE DEPENDENT VARIABLE CP

Z:R: .3170 .4120 .5070 .6020 .6970 .7920

X/C : .723 -.6244 -.5929 -.5953 -.5251 -.5985 -.5551

.737 -.5937 -.5952 -.5956 -.5970 -.5010 -.5517

.821 -.5311 -.5347 -.5658 -.6032 -.5999 -.5496

.987 -.5201 -.6015 -.6055 -.5087 -.5837 -.5468

.993 -.5237 -.6025 -.6112 -.6385 -.5758 -.5331

ALPHA : 1) = -4.093 BETA : 2) = .236 MACH = 1.3933

SECTION : LEFT HAND INSIDE DEPENDENT VARIABLE CP

Z:R: .3170 .4120 .5070 .6020 .6970 .7920

X/C : .723 -.6322 -.5957 -.6027 -.6003 -.5972 -.5605

.737 -.6014 -.5993 -.6027 -.6037 -.4448 -.5574

.821 -.5223 -.6222 -.5639 -.6070 -.5913 -.5567

.987 -.5953 -.6164 -.6125 -.6106 -.5858 -.5564

.993 -.5358 -.6115 -.6189 -.6072 -.5777 -.5454

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OF POOR QUALITY

PARAMETRIC DATA

RUDDER =	.000	SPDBRK =	55.000
BOFLAP =	16.300	L-ELVN =	.000
R-ELVN =	.000	MACH =	1.400

RN/L = 2.9078

DATE : - FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6144

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XE8001)

A,B-4 (2) = - .076 BETA (1) = - 3.908 MACH = 1.3937 Q = 599.50 P = 440.89 RVL = 2.9103

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z,B, - .3170 - .4120 .5070 .6020 .6970 .7920

X,CY - .6292 - .5999 - .6039 - .6046 - .6106 - .5641

.757 - .6039 - .6033 - .6044 - .6044 - .603 - .5626

.625 - .6035 - .6035 - .6044 - .6089 - .5970 - .5600

.857 - .6093 - .6089 - .6106 - .6168 - .5901 - .5562

.368 - .6051 - .6058 - .6163 - .6180 - .5865 - .5495

A,PH4 (2) = - .371 BETA (2) = .147 MACH = 1.3937 Q = 599.50 P = 440.89 RVL = 2.9103

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z,B, - .3170 - .4120 .5070 .6020 .6970 .7920

X,CY - .6263 - .5366 - .6018 - .6020 - .6061 - .5655

.757 - .5983 - .5325 - .6020 - .6042 - .3884 - .5634

.625 - .6053 - .6053 - .6030 - .6089 - .5980 - .5610

.887 - .5972 - .6095 - .6123 - .6156 - .5925 - .5585

.368 - .6137 - .6133 - .6192 - .6154 - .5865 - .5472

A,PH4 (2) = - .356 BETA (3) = 4.215 MACH = 1.3937 Q = 599.50 P = 440.89 RVL = 2.9103

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z,B, - .3170 - .4120 .5070 .6020 .6970 .7920

X,CY - .63+6 - .5060 - .6100 - .5086 - .6071 - .5710

.757 - .6077 - .5070 - .6100 - .6112 - .2854 - .5686

.625 - .6056 - .6056 - .6121 - .6155 - .5011 - .5670

.887 - .5953 - .6137 - .6207 - .6203 - .5971 - .5619

.368 - .6036 - .6153 - .6260 - .6176 - .5916 - .5503

A,PH4 (2) = - .326 BETA (4) = - 3.904 MACH = 1.3940 Q = 600.01 P = 441.12 RVL = 2.9038

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z,B, - .3170 - .4120 .5070 .6020 .6970 .7920

X,CY - .5257 - .5392 - .6051 - .6032 - .6161 - .5720

.757 - .6037 - .6137 - .6065 - .6055 - .3142 - .5699

.625 - .6057 - .6057 - .6121 - .6159 - .5113 - .6051 - .5584

.887 - .5957 - .6156 - .6156 - .6115 - .5189 - .5932 - .5677

.368 - .6037 - .6156 - .6156 - .6115 - .5182 - .5601

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE							(XEX8K01)	
SECTION 1 : RIGHT HAND INSIDE	BETA (1) = 3.825	BETA (2) = .3170	MACH = .466	Q = 1.3940	P = 600.01	R = 441.12	RNL = 2.9038	
SECTION 1 : RIGHT HAND INSIDE								
X	.5265	.5002	-.6051	-.6048	-.6084	-.5726		
Z	.5011	.5016	-.6065	-.6074	.2247	-.5703		
Y	.6011	.5016	-.6065	-.6115	-.6024	-.5693		
X	.5239	.5137	-.6127	-.6182	-.5974	-.5683		
Z	.5265	.5143	-.6131	-.6184	-.5929	-.5556		
Y	.5265	.5143	-.6131	-.6184	-.5929	-.5556		
SECTION 1 : RIGHT HAND INSIDE								
X	.5170	.4120	.5070	.6020	.6970	.7920		
Z	.5170	.4120	.5070	.6020	.6970	.7920		
Y	.5170	.4120	.5070	.6020	.6970	.7920		
X	.6357	.5653	-.6121	-.6117	-.6183	-.5754		
Z	.6357	.5679	-.6135	-.6143	.1185	-.5725		
Y	.6357	.5679	-.6135	-.6143	.1185	-.5725		
X	.6357	.5636	-.6124	-.6203	-.6137	-.5706		
Z	.6357	.5636	-.6124	-.6203	-.6137	-.5706		
Y	.6357	.5636	-.6124	-.6203	-.6137	-.5706		
X	.6357	.5636	-.6238	-.6281	-.6259	-.5702		
Z	.6357	.5636	-.6238	-.6281	-.6259	-.5558		
Y	.6357	.5636	-.6238	-.6281	-.6259	-.5558		
SECTION 1 : RIGHT HAND INSIDE								
X	.5170	.4120	.5070	.6020	.6970	.7920		
Z	.5170	.4120	.5070	.6020	.6970	.7920		
Y	.5170	.4120	.5070	.6020	.6970	.7920		
X	.6316	.5673	-.6130	-.6139	-.6221	-.5829		
Z	.6316	.5699	-.6026	-.6154	.6142	.1305	-.5816	
Y	.6316	.5699	-.6026	-.6154	.6142	.1305	-.5816	
X	.6316	.5681	-.6103	-.6139	.6187	-.6116	-.5793	
Z	.6316	.5681	-.6103	-.6139	.6187	-.6116	-.5793	
Y	.6316	.5681	-.6103	-.6139	.6187	-.6116	-.5793	
X	.6316	.5675	-.6224	-.6216	-.6244	.5068	-.5824	
Z	.6316	.5675	-.6224	-.6216	-.6244	.5068	-.5824	
Y	.6316	.5675	-.6224	-.6216	-.6244	.5068	-.5824	
X	.6316	.5645	-.6235	-.6256	-.6228	-.6023	-.5776	
Z	.6316	.5645	-.6235	-.6256	-.6228	-.6023	-.5776	
Y	.6316	.5645	-.6235	-.6256	-.6228	-.6023	-.5776	
SECTION 1 : RIGHT HAND INSIDE								
X	.5170	.4120	.5070	.6020	.6970	.7920		
Z	.5170	.4120	.5070	.6020	.6970	.7920		
Y	.5170	.4120	.5070	.6020	.6970	.7920		
X	.6295	.5779	-.6121	-.6128	-.6174	-.5832		
Z	.6295	.5793	-.6129	-.6152	.0028	-.5816		
Y	.6295	.5793	-.6129	-.6152	.0028	-.5816		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
X	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Z	.6295	.5797	-.6143	-.6155	-.6126	-.5792		
Y	.6295	.5797	-.6143</td					

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TABULATED PRESSURE DATA - OR148 (AMES 11-073-1)

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ALPHA (4) = 7.869		BETA (3) =	4.207	MACH = 1.3935	Q = 599.60	P = 441.12	RN/L = 2.9058	(XEBK01)
SECTION : RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.708	- .6352	- .6115	- .6188	- .6195	- .6233	- .5849		
.757	- .6117	- .6125	- .6202	- .6202	- .6118	- .5839		
.805	- .6117	- .6134	- .6202	- .6238	- .6171	- .5817		
.887	- .6085	- .6211	- .6229	- .6303	- .6131	- .5820		
.958	- .6048	- .6213	- .6286	- .6322	- .6104	- .5721		
ALPHA (5) = 11.904	BETA (1) =	-3.884	MACH = 1.3941	Q = 599.51	P = 440.65	RN/L = 2.9230		
SECTION : RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.709	- .6395	- .6084	- .6213	- .6227	- .6256	- .5869		
.757	- .6163	- .6115	- .6198	- .6210	- .6085	- .5862		
.805	- .6110	- .6094	- .6146	- .6217	- .6124	- .5853		
.887	- .6082	- .6196	- .6177	- .6237	- .6082	- .5849		
.958	- .6053	- .6184	- .6222	- .6232	- .6017	- .5727		
ALPHA (5) = 11.913	BETA (2) =	.151	MACH = 1.3941	Q = 599.51	P = 440.65	RN/L = 2.9230		
SECTION : RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.708	- .6411	- .6122	- .6233	- .6281	- .6288	- .5911		
.757	- .6205	- .6127	- .6178	- .6262	- .6020	- .5894		
.805	- .6131	- .6131	- .6150	- .6276	- .6195	- .5850		
.887	- .6081	- .6195	- .6219	- .6305	- .6142	- .5861		
.958	- .6053	- .6187	- .6276	- .6309	- .6104	- .5746		
ALPHA (5) = 11.909	BETA (3) =	4.219	MACH = 1.3941	Q = 599.51	P = 440.65	RN/L = 2.9230		
SECTION : RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.709	- .6476	- .6141	- .6238	- .6288	- .6310	- .5926		
.757	- .6220	- .6157	- .6181	- .6279	- .3491	- .5923		
.805	- .6141	- .6162	- .6143	- .6303	- .6229	- .5902		
.887	- .6119	- .6233	- .6212	- .6324	- .6190	- .5905		
.958	- .5074	- .5226	- .5281	- .6338	- .6169	- .5826		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE (XEBK01)						
SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.708	-.6472	-.6225	-.6327	-.6339	-.6763	-.6014
.757	-.6299	-.6223	-.6308	-.6317	-.2756	-.6002
.825	-.6211	-.6215	-.6279	-.6327	-.6212	-.5493
.887	-.6187	-.6351	-.6324	-.6320	-.6172	-.6037
.958	-.6165	-.6344	-.6356	-.6291	-.6112	-.5955
ALPHA (6) = 15.885	BETA (2) = .149	MACH = 1.3935	Q = 599.60	P = 441.12	RNL = 2.9239	
SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.708	-.6444	-.6204	-.6285	-.6354	-.6263	-.5894
.757	-.6252	-.6180	-.6256	-.6344	-.3760	-.5965
.805	-.6214	-.6185	-.6223	-.6354	-.6259	-.5941
.867	-.6144	-.6304	-.6297	-.6378	-.6208	-.5970
.928	-.6128	-.6239	-.6356	-.6373	-.6161	-.5879
ALPHA (6) = 15.931	BETA (3) = 4.249	MACH = 1.3935	Q = 599.60	P = 441.12	RNL = 2.9239	
SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.708	-.6515	-.6276	-.6329	-.6381	-.6338	-.6052
.757	-.6295	-.6256	-.6314	-.6357	-.4917	-.6047
.805	-.6277	-.6251	-.6300	-.6350	-.6276	-.6033
.867	-.6244	-.6346	-.6348	-.6367	-.6252	-.6018
.928	-.6220	-.6343	-.6371	-.6381	-.6240	-.5905

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

REFERENCE DATA				PARAMETRIC DATA			
SPEC	2690.0000 SC.FT.	XMAP	= 1076.5900 IN. X0	RUDER = .000	SPDBRK = 55.000	YMAP	= .000 IN. Y0
LREF	.474 8200 IN.	YMAP	= .0000 IN. Y0	BLFLAP = 16.300	L-ELVN = .000	ZMAP	= .0000 IN. Z0
BREF	.936 .0690 IN.	ZMAP	= .375.0000 IN. Z0	R-ELVN = .000	MACH = 1.250		
SCALE	.0300						
ALPHA : 1) = -4.081	BETA (1) = -3.888	MACH = 1.2475	0 = 599.57	P = 550.40	RNL = 3.0108		
SECTION : 1)RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/BV	.3170 .4120	.5070	.6020	.6970	.7920		
X/CV							
.708	-.7483	-.7281	-.7350	-.7398	-.7496	-.6775	
.757	-.7310	-.7315	-.7341	-.7396	.5668	-.6753	
.805	-.7291	-.7349	-.7350	-.7443	-.7341	-.6770	
.897	-.7243	-.7407	-.7439	-.7558	-.7247	-.6803	
.952	-.7171	-.7366	-.7515	-.7577	-.7183	-.6760	
ALPHA : 1) = -4.075	BETA (2) = .154	MACH = 1.2475	0 = 599.57	P = 550.40	RNL = 3.0108		
SECTION : 1)RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/BV	.3170 .4120	.5070	.6020	.6970	.7920		
X/CV							
.708	-.7653	-.7164	-.7245	-.7264	-.7292	-.6729	
.757	-.7255	-.7202	-.7226	-.7292	.5101	-.6722	
.805	-.7178	-.7188	-.7264	-.7342	-.7209	-.6734	
.887	-.7159	-.7310	-.7350	-.7419	-.7142	-.6735	
.968	-.7130	-.7324	-.7436	-.7421	-.7039	-.6531	
ALPHA : 1) = -4.083	BETA (3) = 4.234	MACH = 1.2475	0 = 599.57	P = 550.40	RNL = 3.0108		
SECTION : 1)RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/BV	.3170 .4120	.5070	.6020	.6970	.7920		
X/CV							
.708	-.7671	-.7234	-.7290	-.7321	-.7304	-.6801	
.757	-.7304	-.7263	-.7276	-.7326	.4220	-.6774	
.805	-.7244	-.7270	-.7328	-.7378	-.7213	-.6777	
.887	-.7230	-.7368	-.7423	-.7423	-.7149	-.6815	
.952	-.7218	-.7419	-.7483	-.7402	-.7034	-.6702	

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB SPEED BRAKE
ALPHA : (2) = -.037 BETA (1) = -3.909 MACH = 1.2477 0 = 599.51 P = 550.16 RN/L = 3.0131

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .723 -.7698 -.7203 -.7298 -.7355 -.7465 -.6782

.757 -.731P -.7246 -.7288 -.7364 -.7508 -.6768

.805 -.7251 -.7270 -.7302 -.7429 -.7302 -.6759

.837 -.7201 -.7325 -.7391 -.7520 -.7217 -.6710

.368 -.7152 -.7332 -.7469 -.7539 -.7145 -.6600

ALPHA : (2) = -.032 BETA (2) = .147 MACH = 1.2477 0 = 599.51 P = 550.16 RN/L = 3.0131

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .738 -.7629 -.7195 -.7242 -.7278 -.7324 -.6780

.757 -.7296 -.7212 -.7235 -.7307 -.7324 -.6746

.805 -.7214 -.7228 -.7257 -.7355 -.7242 -.6761

.837 -.7195 -.7323 -.7331 -.7429 -.7168 -.6769

.562 -.7185 -.7330 -.7432 -.7450 -.7092 -.6568

ALPHA : (2) = -.038 BETA (3) = 4.211 MACH = 1.2477 0 = 599.51 P = 550.16 RN/L = 3.0131

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7709 -.7272 -.7363 -.7389 -.7425 -.6861

.757 -.7364 -.7316 -.7346 -.7420 -.7659 -.6851

.805 -.7304 -.7325 -.7377 -.7485 -.7336 -.6859

.837 -.7284 -.7422 -.7475 -.7539 -.7267 -.6834

.968 -.7263 -.7445 -.7547 -.7544 -.7172 -.6592

ALPHA : (3) = 3.858 BETA (1) = -3.910 MACH = 1.2468 0 = 599.65 P = 551.10 RN/L = 3.0140

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.7659 -.7230 -.7325 -.7370 -.7461 -.6893

.757 -.7338 -.7259 -.7318 -.7392 -.7427 -.6862

.805 -.7237 -.7268 -.7330 -.7442 -.7358 -.6852

.837 -.7228 -.7363 -.7416 -.7521 -.7291 -.6800

.968 -.7211 -.7353 -.7475 -.7537 -.7251 -.6633

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

(XEQK02)

ALPHA (3) = 3.859 BETA (2) = .139 MACH = 1.2468 O = 599.65 P = 551.10 RNL = 3.0140

SECTION (1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.7563 -.7163 -.7233 -.7273 -.7335 -.679E

.757 -.7261 -.7182 -.7223 -.7297 -.7446 -.6770

.805 -.7180 -.7202 -.7259 -.7357 -.7245 -.6780

.897 -.7178 -.7301 -.7347 -.7423 -.7197 -.6765

.968 -.7144 -.7318 -.7395 -.7454 -.7118 -.6571

ALPHA (3) = 3.860 BETA (3) = 4.204 MACH = 1.2468 O = 599.65 P = 551.10 RNL = 3.0140

SECTION (1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.7597 -.7228 -.7329 -.7415 -.7439 -.6847

.757 -.7290 -.7257 -.7315 -.7413 -.0709 -.6821

.805 -.7242 -.7281 -.7327 -.7451 -.7732 -.6819

.897 -.7245 -.7294 -.7422 -.7530 -.7277 -.6845

.968 -.7242 -.7401 -.7504 -.7506 -.7229 -.6704

ALPHA (4) = 7.842 BETA (1) = -3.905 MACH = 1.2465 O = 599.60 P = 551.34 RNL = 3.0137

SECTION (1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.7497 -.7134 -.7246 -.7292 -.7342 -.679I

.757 -.7239 -.7181 -.7244 -.7323 -.0154 -.6793

.805 -.7177 -.7179 -.7280 -.7349 -.7268 -.6795

.897 -.7139 -.7297 -.7363 -.7423 -.7191 -.6770

.968 -.7124 -.7313 -.7413 -.7420 -.7129 -.6589

ALPHA (4) = 7.841 BETA (2) = .143 MACH = 1.2465 O = 599.60 P = 551.34 RNL = 3.0137

SECTION (1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.7-63 -.7C97 -.51 -.7235 -.7269 -.6716

.757 -.7159 -.7121 -.7154 -.7262 -.0756 -.6706

.815 -.7132 -.7129 -.7152 -.7305 -.7161 -.6708

.897 -.7033 -.7032 -.7031 -.7031 -.7095 -.6686

.969 -.7055 -.7054 -.7053 -.7052 -.6999 -.6543

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

ALPHA (4) = 7.841 BETA (3) = 4.209 MACH = 1.2465 0 = 599.60 P = 551.34 RN/L = 3.0137

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.7328 -.7495 -.7183 -.7223 -.7328 -.7326 -.6787

-.757 -.7211 -.7178 -.7245 -.7350 -.7036 -.6763

-.605 -.7171 -.7183 -.7252 -.7340 -.7257 -.6753

-.987 -.7159 -.7293 -.7324 -.7409 -.7209 -.6695

-.552 -.7166 -.7314 -.7771 -.7424 -.7190 -.6646

ALPHA (5) = 11.942 BETA (1) = -3.887 MACH = 1.2452 0 = 599.20 P = 552.04 RN/L = 3.0172

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.7353 -.7073 -.7105 -.7198 -.7186 -.6670

-.757 -.7130 -.7390 -.7129 -.7232 -.7210 -.6639

-.635 -.7049 -.7090 -.7174 -.7251 -.7091 -.6639

-.697 -.7046 -.7182 -.7241 -.7292 -.7036 -.6616

-.963 -.7051 -.7213 -.7330 -.7292 -.6940 -.6438

ALPHA (5) = 11.952 BETA (2) = .148 MACH = 1.2452 0 = 599.20 P = 552.04 RN/L = 3.0172

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.7523 -.7149 -.7255 -.7293 -.7357 -.6798

-.757 -.7243 -.7156 -.7245 -.7317 -.4084 -.6776

-.635 -.7175 -.7171 -.7271 -.7372 -.7267 -.6776

-.987 -.7161 -.7274 -.7357 -.7455 -.7183 -.6755

-.552 -.7133 -.7310 -.7436 -.7487 -.7114 -.6609

ALPHA (5) = 11.946 BETA (3) = 4.215 MACH = 1.2452 0 = 599.20 P = 552.04 RN/L = 3.0172

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.7382 -.7389 -.7132 -.7254 -.7283 -.6687

-.757 -.7127 -.7384 -.7139 -.7281 -.5064 -.6666

-.805 -.7123 -.7118 -.7156 -.7308 -.7185 -.6678

-.687 -.7250 -.7215 -.7245 -.7348 -.7139 -.6667

-.558 -.7167 -.7229 -.7319 -.7348 -.7137 -.6555

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
 LREF = .474.8000 IN. YMRP = .0000 IN. YO
 EREF = 936.0580 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0300

$\alpha_{\text{LPHA}}(1) = -4.048$ $\beta_{\text{ETA}}(1) = -3.881$ MACH = .0973 Q = 599.56 P = 710.72 RN/L = 3.1865

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.8795	-.8515	-.8598	-.8921	-.8830	-.7799
	.757	-.8572	-.8522	-.8653	-.8904	.5686	.7813
	.805	-.8438	-.8500	-.8749	-.8928	-.8627	.7803
	.887	-.9355	-.8516	-.8930	-.9335	-.8439	.7736
	.958	-.8407	-.8733	-.9117	-.8990	-.8329	.7619

$\alpha_{\text{LPHA}}(1) = -4.035$ $\beta_{\text{ETA}}(2) = .153$ MACH = 1.0978 Q = 599.56 P = 710.72 RN/L = 3.1865

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.758	-.8770	-.8405	-.8509	-.8745	-.8700	-.7811
	.757	-.8879	-.8441	-.8552	-.8762	.5193	.7823
	.805	-.8559	-.8419	-.8626	-.8793	-.8528	.7837
	.987	-.8307	-.8521	-.8793	-.8870	-.8401	.7895
	.958	-.8376	-.8766	-.8934	-.8867	-.8301	.7676

$\alpha_{\text{LPHA}}(1) = -4.044$ $\beta_{\text{ETA}}(3) = .4.236$ MACH = 1.0978 Q = 599.56 P = 710.72 RN/L = 3.1865

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.738	-.8613	-.8305	-.8378	-.8614	-.8571	-.7699
	.757	-.8327	-.8303	-.8449	-.8655	.4404	.7659
	.855	-.8233	-.8315	-.8526	-.8688	-.8359	.7683
	.937	-.8217	-.8495	-.8712	-.8791	-.8275	.7695
	.938	-.8301	-.8541	-.8850	-.8779	-.8153	.7461

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(XESK03) (13 AUG 75)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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		AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE			
ALPHA (2) =	- .027	BETA (1) =	- 3.903	MACH =	1.0988
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970
X/CV					
.709	- .8372	- .8156	- .8235	- .8575	- .8570
.757	- .8178	- .8156	- .8314	- .8598	- .8498
.805	- .8089	- .8166	- .8405	- .8618	- .8350
.887	- .8034	- .8313	- .8594	- .8723	- .8171
.359	- .8101	- .8442	- .8773	- .8706	- .8076
ALPHA (2) =	- .023	BETA (2) =	.144	MACH =	1.0988
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970
X/CV					
.709	- .8218	- .8017	- .8061	- .8386	- .8390
.757	- .8022	- .8024	- .8147	- .8431	- .8430
.805	- .7911	- .7990	- .8259	- .8431	- .8307
.887	- .7906	- .8155	- .8464	- .8548	- .8144
.258	- .7988	- .8367	- .8605	- .8619	- .8011
ALPHA (2) =	- .023	BETA (3) =	.4209	MACH =	1.0988
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970
X/CV					
.709	- .8075	- .7905	- .8044	- .8345	- .8343
.757	- .7943	- .7917	- .8128	- .8419	- .8419
.805	- .7927	- .7997	- .8264	- .8448	- .8259
.37	- .7907	- .8132	- .8462	- .8534	- .8099
.958	- .7943	- .8331	- .8643	- .8622	- .7266
ALPHA (3) =	3.893	BETA (1) =	- 3.903	MACH =	1.0982
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970
X/CV					
.709	- .8152	- .7934	- .8128	- .8465	- .8400
.757	- .7934	- .7946	- .8194	- .8469	- .1539
.805	- .7915	- .7955	- .8287	- .8489	- .7321
.887	- .7972	- .8129	- .8339	- .8538	- .7321
.258	- .7953	- .8277	- .8557	- .8557	- .7285

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-0731OA14B) 1404/B/C/R 008 SPEED BRAKE

(XEBK031)

ALPHA (3) = 3.894 BETA (2) = .147 MACH = 1.0882 Q = 599.43 P = 710.01 RNL = 3.1855

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7736 -.7544 -.7765 -.8080 -.8147 -.7120

.757 -.7520 -.7551 -.7846 -.8142 -.0720 -.7101

.805 -.7465 -.7599 -.7923 -.8109 -.7870 -.7113

.897 -.7530 -.7855 -.8138 -.8236 -.7720 -.7116

.968 -.7575 -.8063 -.8307 -.8236 -.7655 -.6920

ALPHA (3) = 3.895 BETA (3) = 4.201 MACH = 1.0982 Q = 599.43 P = 710.01 RNL = 3.1855

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .510 .6020 .6970 .7920

X/CV .708 -.7737 -.7564 -.7838 -.8252 -.8206 -.7038

.757 -.7624 -.7605 -.7915 -.8223 -.0283 -.7045

.805 -.7550 -.7622 -.8063 -.8268 -.7884 -.7021

.887 -.7557 -.8017 -.8250 -.8347 -.7719 -.7015

.968 -.7706 -.8212 -.8874 -.8261 -.7638 -.6787

ALPHA (4) = 7.886 BETA (1) = -3.898 MACH = 1.0976 Q = 599.10 P = 710.48 RNL = 3.1859

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7759 -.7561 -.7829 -.8136 -.8074 -.7077

.757 -.7659 -.7685 -.7917 -.8198 -.1653 -.7070

.805 -.7604 -.7695 -.8010 -.88203 -.7788 -.7041

.887 -.7501 -.7952 -.8148 -.8215 -.7716 -.7068

.958 -.7571 -.8099 -.8284 -.8218 -.7537 -.5849

ALPHA (4) = 7.896 BETA (2) = -144 MACH = 1.0976 Q = 599.10 P = 710.48 RNL = 3.1859

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7118 -.7058 -.7194 -.7655 -.7655 -.6652

.757 -.7044 -.7104 -.7323 -.7674 -.2557 -.6631

.805 -.6955 -.7113 -.7450 -.7641 -.7409 -.6676

.887 -.7038 -.7324 -.7670 -.7751 -.7280 -.6591

.958 -.7032 -.7610 -.7870 -.7744 -.7196 -.6471

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TABLED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R CRB SPEED BRAKE

ALPHA (4) = 7.935 BETA (3) = 4.200 MACH = 1.0976 O = 599.10 P = 710.48 RNL = 3.1859

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.7544 -.7443 -.7563 -.8079 -.8019 -.6909

.757 -.7477 -.7513 -.7775 -.8117 -.3943 -.6887

.855 -.7295 -.7508 -.7854 -.8067 -.7682 -.6851

.897 -.7448 -.7820 -.8102 -.8141 -.7606 -.6845

.953 -.7529 -.7930 -.8203 -.8138 -.7496 -.6658

ALPHA (5) = 11.990 BETA (1) = -3.881 MACH = 1.0978 O = 599.38 P = 710.48 RNL = 3.1859

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.7576 -.7578 -.7781 -.8000 -.7871 -.7001

.757 -.7567 -.7671 -.7671 -.8048 -.5247 -.6965

.855 -.7557 -.7595 -.7926 -.8079 -.7630 -.6981

.897 -.7563 -.7251 -.8038 -.8054 -.7530 -.6989

.953 -.7551 -.8057 -.8138 -.8069 -.7396 -.6776

ALPHA (5) = 11.937 BETA (2) = -149 MACH = 1.0973 O = 599.38 P = 710.48 RNL = 3.1858

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.7578 -.7539 -.7570 -.7958 -.8232 -.8149 -.7143

.757 -.7537 -.7537 -.7575 -.7970 -.8230 -.6363 -.7129

.855 -.7527 -.7527 -.7523 -.8030 -.8233 -.7927 -.7085

.897 -.7581 -.7581 -.7524 -.8276 -.8283 -.7769 -.7120

.953 -.7551 -.9395 -.8424 -.8240 -.7574 -.6897

ALPHA (5) = 11.932 SETA (3) = 4.212 MACH = 1.0978 O = 599.38 P = 710.48 RNL = 3.1856

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.7559 -.7537 -.7537 -.7726 -.8049 -.7978 -.6870

.7553 -.7546 -.7546 -.7796 -.8035 -.7350 -.6886

.855 -.7545 -.7545 -.7529 -.7916 -.8029 -.7725 -.6853

.897 -.7543 -.7543 -.7524 -.8132 -.8091 -.7569 -.6956

.953 -.7535 -.7535 -.8121 -.8236 -.8032 -.7550 -.6841

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THERMISTED PRESSURE DATA - CA148 (AMES 11-073-1)

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AMES 11-073(CA148) -140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SPEC	=	2690.0000 SC.FT.	XMAP	=	1076.6800 IN. XO
U-EF	=	.474.6000 IN.	YMAP	=	.0000 IN. YO
E-EF	=	.336.0580 IN.	ZMAP	=	.375.0000 IN. ZO
SCALE	=	.0300			

ALPHA (1) = -4.058 BETA (1) = -3.880 MACH = .89913 Q = 599.67 P = 1059.7 RNL = 3.5733

SECTION: (1) RIGHT HAND INSIDE

Z/B:	.3170	.4120	.5070	.6020	.6970	.7920
X/CP:						
.729	-.4861	-.4931	-.5152	-.5634	-.5479	-.4368
.757	-.4802	-.4926	-.5271	-.5701	-.4762	-.4387
.805	-.4531	-.5065	-.5517	-.5616	-.5259	-.4313
.823	-.4744	-.5345	-.5971	-.5754	-.5083	-.4335
.868	-.5056	-.5345	-.6110	-.5732	-.5030	-.4198

ALPHA (1) = -4.036 BETA (2) = .153 MACH = .89913 Q = 599.67 P = 1059.7 RNL = 3.5733

SECTION: (1) RIGHT HAND INSIDE

Z/B:	.3170	.4120	.5070	.6020	.6970	.7920
X/CP:						
.729	-.4487	-.4410	-.4614	-.5056	-.5163	-.4105
.757	-.4376	-.4501	-.4767	-.5125	-.4017	-.4146
.825	-.4420	-.4616	-.4910	-.5084	-.4998	-.4110
.857	-.4460	-.4982	-.5221	-.5295	-.4774	-.4138
.868	-.4628	-.5146	-.5357	-.5235	-.4762	-.3984

ALPHA (1) = -4.047 BETA (3) = .4.237 MACH = .89913 Q = 599.67 P = 1059.7 RNL = 3.5733

SECTION: (1) RIGHT HAND INSIDE

Z/B:	.3170	.4120	.5070	.6020	.6970	.7920
X/CP:						
.729	-.4796	-.4975	-.4981	-.5424	-.5138	-.4321
.757	-.4710	-.4971	-.5076	-.5546	-.3500	-.4275
.805	-.4799	-.4928	-.5343	-.5596	-.5222	-.4175
.837	-.4763	-.5185	-.5739	-.5663	-.4967	-.4371
.858	-.5124	-.5893	-.5999	-.5715	-.4976	-.4241

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(XEBK04) (13 AUG 75)

PARAMETRIC DATA

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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 $\alpha_{\text{PA4}} (2) = -.025 \quad \beta_{\text{TA}} (1) = -3.907 \quad \text{MACH} = .89827 \quad 0 = 599.10 \quad P = 1060.7 \quad RN/L = 3.5698$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B: -3170 .4120 .5070 .6020 .6970 .7920

X/CPV

.703	-.5150	-.5219	-.5379	-.6083	-.5842	-.4652
.757	-.4975	-.5226	-.5687	-.6160	.2556	-.4523
.805	-.4593	-.5385	-.6021	-.6081	-.5663	-.4539
.887	-.5346	-.5773	-.6293	-.6224	-.5434	-.4459
.953	-.5327	-.6220	-.6594	-.6217	-.5293	-.4195

 $\alpha_{\text{PA4}} (2) = -.020 \quad \beta_{\text{TA}} (2) = .144 \quad \text{MACH} = .89827 \quad 0 = 599.10 \quad P = 1060.7 \quad RN/L = 3.5698$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B: -3170 .4120 .5070 .6020 .6970 .7920

X/CPV

.708	-.4612	-.4590	-.4821	-.5386	-.5336	-.4335
.757	-.4597	-.4634	-.4977	-.5470	.1994	-.4364
.805	-.4602	-.4747	-.5211	-.5467	-.5300	-.4326
.887	-.4588	-.5015	-.5472	-.5449	-.5053	-.4289
.953	-.4739	-.5335	-.5819	-.5599	-.4898	-.4105

 $\alpha_{\text{PA4}} (2) = -.027 \quad \beta_{\text{TA}} (3) = .4215 \quad \text{MACH} = .89827 \quad 0 = 599.10 \quad P = 1060.7 \quad RN/L = 3.5698$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B: -3170 .4120 .5070 .6020 .6970 .7920

X/CPV

.703	-.5158	-.5067	-.5216	-.5853	-.5565	-.4477
.757	-.5000	-.5187	-.5400	-.5934	.1218	-.4427
.805	-.5045	-.5247	-.5625	-.5938	-.5597	-.4390
.887	-.5207	-.5626	-.6137	-.6025	-.5274	-.4391
.953	-.5310	-.5278	-.6322	-.6027	-.5245	-.4237

 $\alpha_{\text{PA4}} (3) = 3.893 \quad \beta_{\text{TA}} (1) = -3.912 \quad \text{MACH} = .89833 \quad 0 = 598.89 \quad P = 1060.2 \quad RN/L = 3.5704$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B: -3170 .4120 .5070 .6020 .6970 .7920

X/CPV

.708	-.5282	-.5347	-.5571	-.6210	-.5702	-.4237
.757	-.5059	-.5273	-.5938	-.6337	-.0720	-.4173
.805	-.5093	-.5513	-.6143	-.6194	-.5585	-.4104
.887	-.5153	-.6321	-.6621	-.6384	-.5277	-.4126
.953	-.5473	-.6537	-.6952	-.6205	-.5115	-.3819

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

(XEBK04)

$$\Sigma_{\text{MA}} (3) = 3.636 \quad \text{BETA} (2) = .152 \quad \text{MACH} = .89633 \quad 0 = 598.89 \quad P = 1060.2 \quad RN/L = 3.5704$$

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z:BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.4933 -.4859 -.5005 -.5541 -.5492 -.4511

.757 -.4712 -.4835 -.5139 -.5558 -.1932 -.4487

.855 -.4742 -.4925 -.5333 -.5634 -.5430 -.4347

.897 -.4751 -.5222 -.5752 -.5808 -.5120 -.4347

.369 -.4364 -.5535 -.5986 -.5824 -.5052 -.4165

ALPHA (3) = 3.899 BETA (3) = 4.208 MACH = .89833

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z:BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5249 -.5131 -.5353 -.6084 -.5509 -.4283

.757 -.5141 -.5294 -.5716 -.6192 -.2939 -.4269

.855 -.5271 -.5430 -.5970 -.6070 -.59F4 -.4178

.897 -.5102 -.5942 -.6504 -.6323 -.5234 -.4187

.369 -.5285 -.5335 -.6774 -.6208 -.5115 -.3928

ALPHA (4) = 7.695 BETA (4) = -3.933 MACH = .89900

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z:BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5681 -.5575 -.5885 -.6568 -.5937 -.4284

.757 -.5434 -.5562 -.6205 -.6733 -.4912 -.4169

.855 -.5371 -.5745 -.6527 -.6606 -.5804 -.4098

.897 -.5386 -.6305 -.7015 -.6594 -.5476 -.3857

.369 -.5727 -.6772 -.7325 -.6537 -.5276 -.3703

ALPHA (4) = 7.935 BETA (2) = .140 MACH = .89900

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z:BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.4933 -.4978 -.5104 -.5771 -.5680 -.4511

.757 -.4925 -.5059 -.5303 -.5838 -.6118 -.4425

.855 -.4841 -.5149 -.5637 -.5814 -.5506 -.4370

.897 -.4851 -.5173 -.6001 -.6008 -.5305 -.4294

.369 -.5123 -.5301 -.5252 -.5921 -.5195 -.4165

ALPHA (4) = 7.935 BETA (2) = .140 MACH = .89900

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z:BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.4933 -.4978 -.5104 -.5771 -.5680 -.4511

.757 -.4925 -.5059 -.5303 -.5838 -.6118 -.4425

.855 -.4841 -.5149 -.5637 -.5814 -.5506 -.4370

.897 -.4851 -.5173 -.6001 -.6008 -.5305 -.4294

.369 -.5123 -.5301 -.5252 -.5921 -.5195 -.4165

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140a/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SREF = 2695.0000 SG.FT. XMP = 1076.6800 IN. X0
 LREF = +74.8000 IN. YMP = .0000 IN. Y0
 EREF = 325.2500 IN. ZMP = 375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -3.396 BETA (1) = -7.893 MACH = .59580 Q = 593.15 P = 2387.2 RN/L = 4.8118

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP
 -.708 -.6730 -.7103 -.7185 -.7230 -.5639 -.3852
 -.757 -.6670 -.7013 -.7565 -.7488 -.5252 -.3794
 -.805 -.6561 -.6977 -.7855 -.7062 -.5574 -.3727
 -.867 -.5520 -.7737 -.8577 -.7011 -.5148 -.3755
 -.958 -.7088 -.8717 -.8413 -.6943 -.5107 -.3600

ALPHA (1) = -3.381 BETA (2) = -3.877 MACH = .59580 Q = 593.15 P = 2387.2 RN/L = 4.8118

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP
 -.738 -.5614 -.5806 -.5920 -.6221 -.5426 -.4088
 -.757 -.5503 -.5971 -.6192 -.6252 -.4582 -.4006
 -.805 -.5513 -.6045 -.6436 -.6170 -.5450 -.3907
 -.887 -.5685 -.6343 -.6933 -.6173 -.5097 -.3883
 -.968 -.5810 -.7007 -.6960 -.6081 -.4954 -.3566

ALPHA (1) = -3.973 BETA (3) = .156 MACH = .59580 Q = 593.15 P = 2387.2 RN/L = 4.8118

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP
 -.708 -.5310 -.5558 -.5650 -.6156 -.5438 -.4016
 -.757 -.5407 -.5537 -.5958 -.6298 -.4112 -.3929
 -.805 -.5373 -.5659 -.6368 -.6235 -.5332 -.3794
 -.897 -.5395 -.6234 -.6524 -.6194 -.4951 -.3710
 -.958 -.5626 -.6918 -.6923 -.6031 -.4827 -.3565

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(XE8K05) (13 AUG 75)

PARAMETRIC DATA

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE
 C = TICN (1) RIGHT HAND INSIDE
 Z = .4120 .5070 .6020 .6970 .7920

(XEBK05)

X/CV

Z/BV

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV

SECTION (1) RIGHT HAND INSIDE

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SECTION (1) RIGHT HAND INSIDE

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SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X/CV

Z/BV

SECTION (1)

BETA (1)

= .4231

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .5151

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .4120

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .5070

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .6020

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .6970

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .7920

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .4120

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .5070

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .6020

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .6970

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .7920

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .4120

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .5070

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .6020

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .6970

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .7920

MACH

= .59580

Q =

= 593.15

P =

= 2387.2

RNL =

4.8118

X/CV

Z/BV

SECTION (1)

BETA (1)

= .4120

MACH

= .59580

Q =

= 593.15

P =

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE							1XEBK05)	
ALPHA (2) = .009	BET. (3) = .144	MACH = .59552	0 = .592.56	P = .2387.2	RNL = 4.8092			
SECTION (1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.708	-.5817	-.5914	-.6077	-.6470	-.5536	-.4091		
.757	-.5728	-.5979	-.6542	-.6621	-.1378	-.4038		
.805	-.5701	-.6204	-.6797	-.6446	-.5564	-.3894		
.897	-.5795	-.6907	-.7250	-.6999	-.5158	-.3690		
.958	-.6193	-.7450	-.7351	-.6384	-.5001	-.3412		
ALPHA (2) = .008	BETA (4) = 4.214	MACH = .59552	0 = .592.56	P = .2387.2	RNL = 4.8092			
SECTION (1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.738	-.6195	-.6354	-.6263	-.6482	-.5522	-.3945		
.757	-.6073	-.6354	-.6558	-.6575	-.0507	-.3820		
.805	-.6054	-.6506	-.6595	-.6595	-.5532	-.3820		
.887	-.6073	-.7067	-.7509	-.6987	-.5064	-.3665		
.958	-.6453	-.7742	-.7745	-.6304	-.4726	-.3267		
ALPHA (2) = .003	BETA (5) = 8.269	MACH = .59552	0 = .592.56	P = .2387.2	RNL = 4.8092			
SECTION (1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.708	-.7172	-.7187	-.6996	-.6912	-.5390	-.3303		
.757	-.6955	-.7320	-.7456	-.7218	-.0147	-.3472		
.805	-.6880	-.7521	-.7985	-.6885	-.5183	-.3219		
.887	-.6950	-.8591	-.8428	-.6729	-.4784	-.3151		
.958	-.7501	-.9315	-.8301	-.6558	-.4374	-.2628		
ALPHA (3) = 3.907	BETA (1) = -7.936	MACH = .59550	0 = .591.74	P = .2387.9	RNL = 4.8093			
SECTION (1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.728	-.7795	-.8030	-.8486	-.8002	-.5549	-.3338		
.757	-.7553	-.8213	-.8751	-.8206	-.2281	-.3133		
.805	-.7458	-.8308	-.9148	-.7999	-.5342	-.2955		
.887	-.7371	-.8913	-.9584	-.7496	-.4820	-.2837		
.958	-.7795	-.9507	-.9690	-.7072	-.4410	-.2643		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE
ALPHA (3) = 3.912 BETA (2) = -3.897 MACH = .59500 Q = 591.74 P = 2387.9 RN/L = 4.8063

SECTION 1; RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV	.708	-.6363	-.6560	-.6734	-.6888	-.5168	-.3337
	.757	-.6193	-.6582	-.6976	-.6811	-.3085	-.3322
	.805	-.6239	-.6659	-.7365	-.6572	-.5229	-.3266
	.857	-.6179	-.7247	-.7843	-.6599	-.4810	-.3026
	.953	-.6635	-.8240	-.7935	-.6323	-.4646	-.2942

ALPHA (3) = 3.909 BETA (3) = .143 MACH = .59500 Q = 591.74 P = 2387.9 RN/L = 4.8063

SECTION 1; RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV	.708	-.6352	-.6101	-.6271	-.6705	-.5656	-.4065
	.757	-.5897	-.6210	-.6560	-.6847	-.3954	-.4012
	.805	-.5983	-.6290	-.6975	-.6700	-.5572	-.3809
	.887	-.5921	-.7037	-.7452	-.6676	-.5261	-.3873
	.958	-.6251	-.7687	-.7633	-.6546	-.4956	-.3517

ALPHA (3) = 3.918 BETA (4) = 4.207 MACH = .59500 Q = 591.74 P = 2387.9 RN/L = 4.8063

SECTION 1; RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV	.708	-.6249	-.6460	-.6490	-.6534	-.5077	-.3421
	.757	-.6121	-.6555	-.6799	-.6676	-.5020	-.3232
	.805	-.6196	-.6775	-.7358	-.6488	-.4976	-.3110
	.887	-.6286	-.6561	-.7561	-.6435	-.4581	-.2971
	.958	-.6693	-.8375	-.7734	-.6078	-.4277	-.2626

ALPHA (3) = 3.922 BETA (5) = 8.252 MACH = .59500 Q = 591.74 P = 2387.9 RN/L = 4.8063

SECTION 1; RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV	.708	-.7302	-.7425	-.7484	-.7155	-.5351	-.3203
	.757	-.7165	-.7559	-.7805	-.7272	-.5784	-.3116
	.805	-.7158	-.7850	-.8444	-.7157	-.5075	-.2993
	.887	-.7336	-.9681	-.8879	-.6860	-.4691	-.2720
	.958	-.7526	-.9273	-.8574	-.6168	-.4151	-.2468

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 14DA/B/C/R ORB SPEED BRAKE

$\alpha_{\text{LPHA}} (4) = 7.956 \quad \beta_{\text{ETA}} (1) = -7.918 \quad \text{MACH} = .59428 \quad Q = 590.57 \quad P = 2388.9 \quad RN/L = 4.8012$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.708	-.7363	-.7577	-.7832	-.6937	-.4820	-.2530
.757	-.7111	-.7780	-.8078	-.7207	-.1.0433	-.2627
.605	-.7012	-.7877	-.8570	-.6818	-.4495	-.2574
.887	-.6917	-.8670	-.8761	-.6411	-.3850	-.2484
.963	-.7339	-.9221	-.8797	-.6087	-.3773	-.2554

 $\alpha_{\text{LPHA}} (4) = 7.965 \quad \beta_{\text{ETA}} (2) = -3.894 \quad \text{MACH} = .59428 \quad Q = 590.57 \quad P = 2388.9 \quad RN/L = 4.8012$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.709	-.6532	-.6627	-.6629	-.6767	-.5089	-.3047
.757	-.6437	-.6705	-.7130	-.6898	-.1.1820	-.2955
.825	-.6265	-.6950	-.7447	-.6542	-.5173	-.3083
.687	-.6214	-.7565	-.8032	-.6598	-.4631	-.3113
.368	-.6735	-.8514	-.8006	-.6329	-.4450	-.3008

 $\alpha_{\text{LPHA}} (4) = 7.970 \quad \beta_{\text{ETA}} (3) = -1.145 \quad \text{MACH} = .59428 \quad Q = 590.57 \quad P = 2388.9 \quad RN/L = 4.8012$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.708	-.6218	-.6358	-.6299	-.6804	-.5708	-.4027
.757	-.6034	-.6324	-.6785	-.6961	-.1.2788	-.3943
.805	-.5945	-.6406	-.7015	-.6860	-.5665	-.3769
.697	-.6309	-.7212	-.7729	-.6870	-.5297	-.3793
.559	-.6318	-.7938	-.7802	-.6491	-.5075	-.3402

 $\alpha_{\text{LPHA}} (4) = 7.969 \quad \beta_{\text{ETA}} (4) = 4.201 \quad \text{MACH} = .59428 \quad Q = 590.57 \quad P = 2388.9 \quad RN/L = 4.8012$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.708	-.6584	-.6676	-.6569	-.6757	-.5168	-.3689
.757	-.6370	-.5647	-.7014	-.6910	-.1.4011	-.3209
.825	-.6397	-.6551	-.7490	-.6707	-.5064	-.3023
.687	-.6475	-.7757	-.8010	-.6165	-.4660	-.2995
.368	-.6855	-.5568	-.8042	-.6117	-.4281	-.2590

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.967 BETA (5) = 8.254 MACH = .59428 Q = 590.57 P = 2388.9 RNL = 4.8012

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.7309 -.7339 -.7357 -.6830 -.4685 -.3033
.757 -.7057 -.7380 -.7650 -.6922 -.1988 -.2899
.805 -.6960 -.7741 -.8124 -.6684 -.4572 -.2804
.857 -.7375 -.9760 -.8593 -.6286 -.4052 -.2761
.959 -.7816 -.9239 -.8180 -.5808 -.3698 -.2583

ALPHA (5) = 12.002 BETA (1) = -7.881 MACH = .59502 Q = 591.86 P = 2388.2 RNL = 4.8047

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.7425 -.7433 -.7458 -.6889 -.4820 -.2953
.757 -.7098 -.7479 -.7690 -.6922 -.2094 -.2856
.805 -.6923 -.7702 -.8091 -.6630 -.4818 -.2945
.887 -.6981 -.8310 -.8298 -.6652 -.4384 -.2816
.963 -.7453 -.8827 -.8452 -.6442 -.4490 -.2914

ALPHA (5) = 12.020 BETA (2) = -3.874 MACH = .59502 Q = 591.86 P = 2388.2 RNL = 4.8047

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.6738 -.6835 -.6728 -.6777 -.5123 -.3147
.757 -.6614 -.6923 -.7134 -.6984 -.0000 -.3091
.805 -.6449 -.7124 -.7554 -.742 -.5242 -.3173
.887 -.6556 -.7548 -.8039 -.6702 -.4658 -.2832
.958 -.6784 -.8319 -.8264 -.6415 -.4291 -.2716

ALPHA (5) = 12.026 BETA (3) = .150 MACH = .59502 Q = 591.86 P = 2388.2 RNL = 4.8047

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.6426 -.5559 -.6508 -.5958 -.5785 -.4070
.757 -.5351 -.5613 -.7033 -.7443 -.0900 -.3938
.805 -.5283 -.6755 -.7274 -.6229 -.5754 -.3798
.887 -.5230 -.7274 -.7927 -.6852 -.5313 -.3592
.959 -.5475 -.8215 -.8131 -.6555 -.4954 -.3340

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(XE8005)

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TABLEULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

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AMES 11-07310A148) -140A/B/C/R ORB SPEED BRAKE

(XES605)

ALPHA (5) = 12.028 BETA (4) = 4.211 MACH = .59502 Q = 591.86 P = 2388.2 RN/L = 4.8047

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-.7276	-.7371	-.7270	-.6831	-.5062	-.3319
.757	-.7022	-.7518	-.7638	-.7079	.0000	-.3167
.805	-.7009	-.7746	-.8141	-.6771	.4816	-.3030
.853	-.7407	-.8513	-.8483	-.6422	-.4349	-.2980
.897	-.7909	-.9219	-.8160	-.5960	-.3976	-.2756

ALPHA (5) = 12.020 BETA (5) = 8.278 MACH = .59502 Q = 591.86 P = 2388.2 RN/L = 4.8047

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-.7276	-.7371	-.7270	-.6831	-.5062	-.3319
.757	-.7022	-.7518	-.7638	-.7079	.0000	-.3167
.805	-.7009	-.7746	-.8141	-.6771	.4816	-.3030
.853	-.7407	-.8513	-.8483	-.6422	-.4349	-.2980
.897	-.7909	-.9219	-.8160	-.5960	-.3976	-.2756

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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 AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE
 (XEBK06) (13 AUG 75)

REFERENCE DATA

	SQ.FT.	XMRP	YMRP	ZMRP	IN. X0	IN. Y0	IN. Z0	RUDDER =	SPDBRK =	L-ELVN =	MACH =	PARAMETRIC DATA
SPCF =	2690 0000							.000	.000			(XEBK06)
LEIF =	.74 .6000	IN.						.500	.500			(13 AUG 75)
BREF =	936 2580	IN.						.000	.000			
SCALE =	.0500							.600	.600			
ALPHA (1) =	-6.026	BETA (1) =	-7.883	MACH =	.59594	0	=	.593.39	P =	2387.0	RNL =	4.8396
SECTION (1) RIGHT HAND INSIDE					DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920						
X/CV												
.708	-.6355	-.6572	-.6865	-.6983	-.5548	-.3947						
.757	-.6266	-.6727	-.7492	-.6992	.5070	-.3974						
.805	-.6107	-.7098	-.7490	-.6911	-.5644	-.3801						
.897	-.6329	-.7515	-.7973	-.6937	-.5351	-.3852						
.958	-.6576	-.8265	-.7947	-.6923	-.5125	.3881						
ALPHA (1) =	-4.010	BETA (2) =	-3.877	MACH =	.59594	0	=	.593.39	P =	2387.0	RNL =	4.8396
SECTION (1) RIGHT HAND INSIDE					DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920						
X/CV												
.708	-.5347	-.5506	-.6040	-.6300	-.5271	-.3975						
.757	-.5325	-.5608	-.6437	-.6387	.4363	-.3890						
.805	-.5927	-.5970	-.6589	-.6216	-.5341	-.3698						
.887	-.5422	-.6467	-.6848	-.6274	-.5028	-.3787						
.958	-.5819	-.5800	-.7060	-.6115	-.4874	-.3473						
ALPHA (1) =	-3.994	BETA (3) =	.154	MACH =	.59594	0	=	.593.39	P =	2387.0	RNL =	4.8396
SECTION (1) RIGHT HAND INSIDE					DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920						
X/CV												
.708	-.5224	-.5453	-.5910	-.6271	-.5280	-.3849						
.757	-.5277	-.5524	-.6237	-.6247	.3925	-.3853						
.805	-.5224	-.5935	-.6674	-.6131	-.5333	-.3810						
.887	-.5322	-.6326	-.6727	-.6218	-.4952	-.3700						
.958	-.5852	-.6971	-.6980	-.6071	-.4709	-.3470						

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

(XEBK05)

$$\text{ALPHA } (1) = -4.001 \quad \text{BETA } (4) = 4.235 \quad \text{MACH} = .59594 \quad 0 = 593.39 \quad P = 2387.0 \quad RNL = 4.8356$$

SECTION 11 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z/BV \quad .3170 \quad .4120 \quad .5070 \quad .6020 \quad .6970 \quad .7920$$

$$X/CY \quad .708 \quad -.5151 \quad -.5530 \quad -.5930 \quad -.6268 \quad -.5227 \quad -.3891$$

$$.757 \quad -.5702 \quad -.5645 \quad -.6431 \quad -.6348 \quad -.3224 \quad -.3863$$

$$.805 \quad -.5683 \quad -.5975 \quad -.6547 \quad -.6187 \quad -.5261 \quad -.3812$$

$$.887 \quad -.5522 \quad -.6546 \quad -.6895 \quad -.6187 \quad -.4923 \quad -.3726$$

$$.958 \quad -.6078 \quad -.7052 \quad -.6899 \quad -.5961 \quad -.4728 \quad -.3545$$

$$\text{ALPHA } (11) = -4.013 \quad \text{BETA } (5) = 8.308 \quad \text{MACH} = .59594 \quad 0 = 593.39 \quad P = 2387.0 \quad RNL = 4.8356$$

SECTION 11 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z/BV \quad .3170 \quad .4120 \quad .5070 \quad .6020 \quad .6970 \quad .7920$$

$$X/CY \quad .708 \quad -.5300 \quad -.6232 \quad -.6599 \quad -.6674 \quad -.5307 \quad -.3861$$

$$.757 \quad -.6150 \quad -.6105 \quad -.7027 \quad -.6772 \quad -.2336 \quad -.3773$$

$$.805 \quad -.6158 \quad -.6761 \quad -.7560 \quad -.6638 \quad -.5276 \quad -.3714$$

$$.887 \quad -.6264 \quad -.7448 \quad -.7738 \quad -.6474 \quad -.4942 \quad -.3657$$

$$.958 \quad -.6895 \quad -.7892 \quad -.7829 \quad -.6234 \quad -.4636 \quad -.3406$$

$$\text{ALPHA } (2) = .023 \quad \text{BETA } (11) = -7.929 \quad \text{MACH} = .59630 \quad 0 = 593.84 \quad P = 2385.7 \quad RNL = 4.8179$$

SECTION 11 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z/BV \quad .3170 \quad .4120 \quad .5070 \quad .6020 \quad .6970 \quad .7920$$

$$X/CY \quad .708 \quad -.7317 \quad -.7596 \quad -.8439 \quad -.8016 \quad -.5640 \quad -.3453$$

$$.757 \quad -.7199 \quad -.7673 \quad -.9058 \quad -.7983 \quad -.2722 \quad -.3367$$

$$.805 \quad -.7134 \quad -.7932 \quad -.9063 \quad -.7774 \quad -.5422 \quad -.3360$$

$$.887 \quad -.7139 \quad -.6533 \quad -.9505 \quad -.7560 \quad -.4829 \quad -.3175$$

$$.958 \quad -.7673 \quad -.9501 \quad -.9882 \quad -.7076 \quad -.4658 \quad -.3023$$

$$\text{ALPHA } (21) = .023 \quad \text{BETA } (21) = -3.895 \quad \text{MACH} = .59630 \quad 0 = 593.84 \quad P = 2385.7 \quad RNL = 4.8179$$

SECTION 11 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z/BV \quad .3170 \quad .4120 \quad .5070 \quad .6020 \quad .6970 \quad .7920$$

$$X/CY \quad .708 \quad -.5701 \quad -.5895 \quad -.6453 \quad -.6623 \quad -.5390 \quad -.3767$$

$$.757 \quad -.5790 \quad -.5057 \quad -.6934 \quad -.6705 \quad -.1763 \quad -.3801$$

$$.805 \quad -.5773 \quad -.5373 \quad -.7018 \quad -.6578 \quad -.5385 \quad -.3760$$

$$.887 \quad -.5962 \quad -.5914 \quad -.7417 \quad -.6551 \quad -.5010 \quad -.3718$$

$$.958 \quad -.583 \quad -.712 \quad -.7453 \quad -.6455 \quad -.4873 \quad -.3341$$

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TABULATED PRESSURE DATA - QAL4B (AMES 11-073-1)

$\alpha_{\text{alpha}} (2) = .035 \quad \text{BETA} (3) = .147 \quad \text{MACH} = .59630 \quad 0 = 593.84$

SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758 -.5421 -.5705 -.6204 -.6533 -.5497 -.3795
.757 -.5552 -.5723 -.603 -.6531 .1276 -.3899
.825 -.5536 -.6051 -.7042 -.6410 -.5334 -.3675
.887 -.5617 -.6241 -.7187 -.6490 -.4966 -.3634
.953 -.5184 -.7330 -.7336 -.6261 -.4850 -.3306

$\alpha_{\text{alpha}} (2) = .050 \quad \text{BETA} (4) = .4214 \quad \text{MACH} = .59630 \quad 0 = 593.84$

SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758 -.5705 -.6012 -.6379 -.6701 -.5311 -.3779
.757 -.5736 -.6109 -.7036 -.6793 .0120 -.3777
.825 -.551+C -.6462 -.7142 -.6547 -.5384 -.3690
.887 -.5354 -.7351 -.7452 -.6518 -.4926 -.3457
.958 -.5542 -.7575 -.7641 -.6306 -.4620 -.3242

$\alpha_{\text{alpha}} (2) = .045 \quad \text{BETA} (5) = .8269 \quad \text{MACH} = .59630 \quad 0 = 593.84$

SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758 -.5607 -.6825 -.7368 -.7176 -.5305 -.3268
.757 -.6593 -.7163 -.8126 -.7253 -.0481 -.3232
.825 -.6519 -.7546 -.8251 -.7003 -.5163 -.3155
.887 -.6590 -.6993 -.8503 -.6685 -.4940 -.3082
.958 -.7889 -.9323 -.8448 -.6317 -.4211 -.2712

$\alpha_{\text{alpha}} (3) = .3.31 \quad \text{BETA} (1) = .7.932 \quad \text{MACH} = .59594 \quad 0 = 593.13$

SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758 -.7401 -.7773 -.8654 -.8166 -.5723 -.3265
.757 -.7439 -.7922 -.9282 -.8337 -.2406 -.3272
.825 -.7242 -.8342 -.9349 -.7964 -.5537 -.3072
.887 -.7336 -.9237 -.9739 -.7594 -.4818 -.2881
.958 -.7337 -.9562 -.9211 -.7130 -.4381 -.2719

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(XEBK05)

(XEBK06)

(XEBK07)

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(XEBK09)

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(XEBK40)

(XEBK41)

(XEBK42)

(XEBK43)

(XEBK44)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (3) = 2.915 BETA (2) = -3.897 MACH = .59594 Q = 593.13 P = 2395.8 PN/L = 4.8146

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .793 -.5259 -.6171 -.6745 -.6624 -.5021 -.3284
 .757 -.5352 -.6172 -.7215 -.6767 -.3385 -.3303
 .805 -.5901 -.6634 -.7391 -.6497 -.5152 -.3484
 .897 -.5917 -.7187 -.7596 -.6523 -.6677 -.3332
 .958 -.6484 -.7789 -.7588 -.6270 -.4607 -.3079

ALPHA (3) = 3.912 BETA (3) = .150 MACH = .59594 Q = 593.13 P = 2395.8 PN/L = 4.8146

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .728 -.5469 -.5763 -.6233 -.6671 -.5529 -.3908
 .757 -.5526 -.5927 -.6555 -.6796 -.3937 -.3977
 .825 -.5594 -.6168 -.6971 -.6565 -.5476 -.3833
 .887 -.5601 -.6841 -.7344 -.6669 -.5055 -.3668
 .958 -.6260 -.7404 -.7568 -.6289 -.4901 -.3426

ALPHA (3) = 3.921 BETA (4) = .4.204 MACH = .59594 Q = 593.13 P = 2395.8 PN/L = 4.8146

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .739 -.5809 -.6210 -.6786 -.6526 -.5007 -.3161
 .757 -.5842 -.6297 -.7123 -.6651 -.5419 -.3166
 .835 -.5934 -.6720 -.7491 -.6598 -.4256 -.3055
 .887 -.6111 -.7551 -.7787 -.6391 -.4489 -.2931
 .953 -.6850 -.8117 -.7633 -.6008 -.4177 -.2686

ALPHA (3) = 3.925 BETA (5) = 8.248 MACH = .59594 Q = 593.13 P = 2395.8 PN/L = 4.8146

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .759 -.5260 -.7214 -.6071 -.7482 -.5306 -.3122
 .751 -.6325 -.7632 -.8757 -.7521 -.6194 -.2994
 .835 -.6214 -.8237 -.7328 -.769 -.4871 -.2951
 .887 -.7420 -.9264 -.6593 -.6935 -.4625 -.2843
 .953 -.6263 -.9301 -.8531 -.5249 -.4184 -.2483

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.957 BETA (1) = -7.908 MACH = .59612 Q = 593.49 P = 2385.7 RVL = 4.8178

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6944 -.7448 -.8009 -.7416 -.4972 -.2691

.757 -.6942 -.7448 -.8616 -.7231 -.0738 -.2765

.805 -.6814 -.8017 -.8775 -.6982 -.498 -.2631

.857 -.8645 -.8749 -.8919 -.6944 -.4128 -.2646

.909 -.7512 -.9155 -.9319 -.6546 -.4109 -.2492

ALPHA (4) = 7.956 BETA (2) = -3.891 MACH = .59612 Q = 593.49 P = 2385.7 RVL = 4.8178

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5959 -.6147 -.6696 -.6712 -.5053 -.3373

.757 -.5361 -.6349 -.7201 -.6797 -.1.2240 -.3354

.805 -.5361 -.6573 -.7363 -.6595 -.5107 -.3084

.857 -.5987 -.7514 -.7707 -.6440 -.4587 -.3187

.909 -.6934 -.7935 -.7731 -.6204 -.4572 -.2997

ALPHA (4) = 7.972 BETA (3) = .143 MACH = .59612 Q = 593.49 P = 2385.7 RVL = 4.8178

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5439 -.5732 -.6409 -.6710 -.5568 -.3911

.757 -.5674 -.6022 -.6659 -.6773 -.1.2921 -.3877

.805 -.5538 -.6335 -.6295 -.6654 -.5550 -.3739

.857 -.5549 -.6841 -.7308 -.6580 -.5163 -.3649

.909 -.6323 -.7457 -.7455 -.6365 -.4930 -.3454

ALPHA (4) = 7.971 BETA (4) = .4.201 MACH = .59612 Q = 593.49 P = 2385.7 RVL = 4.8178

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5857 -.6219 -.6720 -.6532 -.5040 -.3122

.757 -.5847 -.6236 -.7121 -.6660 -.1.4354 -.3154

.805 -.5981 -.6721 -.7499 -.6564 -.4989 -.2927

.857 -.6132 -.7434 -.7722 -.6477 -.4617 -.3111

.909 -.6772 -.8263 -.7842 -.6018 -.4275 -.2701

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(XEB06)

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TRANSLATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

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Z-B4 : 4 = 7.959 BETA (5) = 8.255 MACH = .59612 Q = 593.49 P = 2395.7 RNL = 4.9178
 SECTION (1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

X/CV
 .728 -.6616 -.5871 -.7708 -.6948 -.4673 -.2739
 .757 -.6577 -.7122 -.6292 -.6934 -.4957 -.2795
 .825 -.6507 -.8020 -.8523 -.6742 -.588 -.2888
 .887 -.7099 -.9158 -.8660 -.6422 -.4143 -.2752
 .953 -.8211 -.9565 -.9357 -.5790 -.3852 -.2674
 ALPHA (5) = 12.009 BETA (1) = -7.872 MACH = .47710 Q = 475.06 P = 1908.1 RNL = 3.8563

Z-B7 : .3170 .4120 .5070 .6020 .6970 .7920
 SECTION (1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

X/CV
 .703 -.6776 -.7057 -.7790 -.7206 -.5001 -.2975
 .757 -.6730 -.7345 -.8125 -.7184 -.2345 -.2984
 .825 -.6525 -.7560 -.8465 -.6858 -.4854 -.2859
 .887 -.6594 -.8293 -.8508 -.6892 -.4480 -.2794
 .953 -.7182 -.8749 -.8607 -.6859 -.4504 -.2778
 ALPHA (5) = 12.030 BETA (2) = -3.872 MACH = .47710 Q = 475.06 P = 1908.1 RNL = 3.8563

Z-B7 : .3170 .4120 .5070 .6020 .6970 .7920
 SECTION (1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

X/CV
 .708 -.5981 -.6185 -.6714 -.6733 -.5235 -.3324
 .757 -.5649 -.6209 -.7081 -.6690 .0090 -.3348
 .825 -.5573 -.6541 -.7457 -.6545 -.4951 -.3163
 .887 -.5395 -.7325 -.7479 -.6531 -.4632 -.3057
 .953 -.6412 -.7133 -.7752 -.6324 -.4485 -.3136
 ALPHA (5) = 12.036 BETA (3) = .140 MACH = .47710 Q = 475.06 P = 1908.1 RNL = 3.8563

Z-B7 : .3170 .4120 .5070 .6020 .6970 .7920
 SECTION (1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

X/CV
 .706 -.5771 -.6132 -.5402 -.6654 -.5599 -.3967
 .757 -.5805 -.6234 -.6359 -.6953 .0000 -.3852
 .825 -.5749 -.6556 -.7345 -.6707 -.5506 -.3722
 .887 -.5687 -.6335 -.7512 -.6685 -.5134 -.3589
 .953 -.5376 -.7825 -.7613 -.6553 -.4997 -.3420

Date 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)
 AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

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(XEROXED) (13 AUG 75)

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. X0
 LREF = 474.8200 IN. YMPP = .0000 IN. Y0
 BREF = 335.5520 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -4.068 BETA (1) = -3.876 MACH = .89933 0 = 599.81 P = 1029.5 RNL = 3.583

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 0 .7920

X/CY
 -.708 -.4617 -.4871 -.5012 -.539
 -.757 -.4610 -.4825 -.5155 -.548
 -.805 -.4662 -.4957 -.5368 -.585
 -.887 -.4720 -.5359 -.5692 -.582
 -.368 -.4940 -.5664 -.5890 -.5
 ALPHA (1) = -4.048 BETA (2) =
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 0 .7920

X/CY
 -.738 -.4292 -.4428 -.4674 -.5102 -.5048
 -.757 -.4283 -.4390 -.4776 -.5043 -.3779
 -.805 -.4317 -.4529 -.4905 -.5129 -.4933
 -.887 -.4395 -.4893 -.5250 -.5164 -.4645
 -.968 -.4572 -.5090 -.5341 -.5205 -.4643
 ALPHA (1) = -4.057 BETA (3) = 4.237 MACH = .89933 0 = 599.81 P = 1029.5 RNL = 3.583

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 -.738 -.4721 -.4721 -.4924 -.5417 -.5188
 -.757 -.4597 -.4779 -.5250 -.5620 -.3271
 -.805 -.4747 -.4344 -.5517 -.5617 -.5212
 -.887 -.4841 -.5372 -.5716 -.5565 -.5002
 -.968 -.5116 -.5686 -.5947 -.5615 -.4902
 RUDER = .000 SPDBLK = 55.000
 BOFLAP = 22.500 L-ELVN = .000
 R-ELVN = .000 MACH = .903
 RNL = 3.583

PARAMETRIC DATA

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

AMES 11-073(04148) -140A/B/C/R ORB SPEED BRANE

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ALPHA (2) = .010 BETA (1) = -3.903 MACH = .90060 Q = 601.03 P = 1058.5 RNL = 3.5880

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .768 -.4837 -.4954 -.5174 -.5749 -.5592 -.4319
 .757 -.4858 -.4951 -.5440 -.5818 -.2464 -.4323
 .805 -.4795 -.5214 -.5540 -.5918 -.5381 -.4351
 .887 -.8869 -.5600 -.5982 -.5844 -.5190 -.4293
 .969 -.5154 -.5895 -.6205 -.5856 -.5050 -.4247

ALPHA (2) = .014 BETA (2) = .148 MACH = .90060 Q = 601.03 P = 1058.5 RNL = 3.5880

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.4381 -.4527 -.4773 -.5231 -.5175 -.4267
 .757 -.4481 -.4510 -.4949 -.5239 -.1666 -.4174
 .805 -.4495 -.4753 -.5234 -.5334 -.5123 -.4295
 .887 -.4620 -.5046 -.5408 -.5439 -.4954 -.4187
 .968 -.4827 -.5325 -.5691 -.5389 -.4937 -.4051

ALPHA (2) = .013 BETA (3) = 4.211 MACH = .90060 Q = 601.03 P = 1058.5 RNL = 3.5880

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.4839 -.4923 -.5309 -.5852 -.5404 -.4369
 .757 -.4933 -.4995 -.5528 -.5904 -.1005 -.4381
 .805 -.4930 -.5193 -.5695 -.5952 -.5476 -.4270
 .887 -.4959 -.5517 -.6052 -.5893 -.5186 -.4254
 .963 -.5279 -.5911 -.6289 -.5918 -.5088 -.4054

ALPHA (3) = 3.998 BETA (1) = -3.905 MACH = .90070 Q = 600.82 P = 1059.0 RNL = 3.5882

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.4962 -.5189 -.5437 -.6075 -.5616 -.4370
 .757 -.4984 -.5205 -.5680 -.6056 -.1104 -.4318
 .805 -.5005 -.5405 -.5990 -.6149 -.5499 -.4275
 .887 -.5099 -.5758 -.6305 -.6092 -.5266 -.4102
 .963 -.5316 -.6253 -.6534 -.6094 -.5190 -.4047

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (3) = 4.002 BETA (2) = .135 MACH = .9070 0 = 600.82 P = 1058.0 RNL = 3.5882

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.709	-.4449	-.4625	-.4710	-.5304	-.5190	-.4245
.757	-.4494	-.4589	-.4929	-.5361	-.2053	-.4256
.805	-.4515	-.4792	-.5243	-.5523	-.5114	-.4223
.887	-.4673	-.5077	-.5504	-.5471	-.4998	-.4148
.968	-.4849	-.5427	-.5782	-.5468	-.4884	-.4069

ALPHA (3) = 3.920 BETA (3) = 4.206 MACH = .9070 0 = 600.82 P = 1058.0 RNL = 3.5882

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.758	-.4880	-.5067	-.5482	-.5997	-.5463	-.4315
.757	-.4929	-.5165	-.5728	-.6078	-.3235	-.4262
.805	-.5012	-.5165	-.6021	-.6025	-.5575	-.4305
.887	-.5295	-.5249	-.6330	-.6116	-.5166	-.4250
.968	-.5514	-.6342	-.6512	-.6085	-.5087	-.4025

ALPHA (4) = 7.946 BETA (1) = -3.900 MACH = .89867 0 = 599.20 P = 1059.9 RNL = 3.5837

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.5260	-.5432	-.5703	-.6348	-.5882	-.4445
.757	-.5252	-.5439	-.5980	-.6381	-.5076	-.4336
.805	-.5353	-.5523	-.6310	-.6405	-.5770	-.4398
.887	-.5345	-.5926	-.6577	-.6465	-.5508	-.4191
.968	-.5542	-.6405	-.7004	-.6712	-.5369	-.4009

ALPHA (4) = 7.955 BETA (2) = -143 MACH = .89867 0 = 599.20 P = 1059.9 RNL = 3.5837

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.4565	-.4625	-.5037	-.5543	-.5355	-.4166
.757	-.4513	-.4742	-.5287	-.5639	-.6312	-.4256
.805	-.4573	-.4997	-.5455	-.5751	-.5219	-.4292
.887	-.4669	-.5157	-.5746	-.5777	-.5085	-.4253
.968	-.4987	-.5633	-.5976	-.5727	-.4913	-.4050

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 1400/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SREF =	2690.0000	SQ.FT.	XRP =	1076.6800	IN. X0
LREF =	.74.8CC	IN.	YRP =	.0000	IN. Y0
BREF =	935.6890	IN.	ZRP =	375.0000	IN. Z0
SCALE =	.C300				

ALPHA (1) = -4.017 BETA (1) = -3.884 MACH = 1.3953 Q = 598.61 P = 439.24 RNL = 2.9166

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV					
.708	-.6313	-.6212	-.6279	-.6223	-.6113
.757	-.6148	-.6217	-.6295	-.6275	-.6108
.825	-.6172	-.6235	-.6302	-.6285	-.6166
.887	-.5169	-.5316	-.5321	-.6243	-.6149
.958	-.6179	-.6345	-.6311	-.6213	-.6108

ALPHA (1) = -3.956 BETA (2) = .155 MACH = 1.3953 Q = 598.61 P = 439.24 RNL = 2.9166

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CT					
.708	-.6471	-.6291	-.6350	-.6478	-.6373
.757	-.6263	-.6291	-.6395	-.6509	-.6164
.825	-.6263	-.6313	-.6412	-.6526	-.6175
.887	-.6275	-.6401	-.6443	-.6462	-.6338
.958	-.5277	-.6443	-.6454	-.5462	-.6202

ALPHA (1) = -4.012 BETA (3) = 4.241 MACH = 1.3953 Q = 598.61 P = 439.24 RNL = 2.9166

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV					
.708	-.6409	-.6217	-.6285	-.6330	-.6323
.757	-.6169	-.5212	-.5312	-.5330	-.6199
.825	-.5189	-.5220	-.6316	-.6337	-.6218
.887	-.5205	-.6343	-.5325	-.6335	-.6287
.958	-.5220	-.6374	-.6335	-.6325	-.6278

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(13 AUG 75)

PARAMETRIC DATA

RUDDER =	.000	SPOBRK =	85.000
BOFLAP =	22.500	L-ELVN =	.000
R-ELVN =	.000	MACH =	1.400

IXEBK000 (13 AUG 75)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R ORB SPEED BRAKE							
ALPHA (2) =	- .007	BETA (1) =	- 3.899	MACH =	1.3961	Q =	598.93
SECTION (1) RIGHT HAND INSIDE				DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP
ALPHA (2) =	- .031	BETA (2) =	.155	MACH =	1.3961	Q =	598.93
SECTION (1) RIGHT HAND INSIDE				DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP
ALPHA (2) =	- .036	BETA (3) =	4.218	MACH =	1.3961	Q =	598.93
SECTION (1) RIGHT HAND INSIDE				DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP
ALPHA (3) =	3.849	BETA (1) =	- 3.939	MACH =	1.3959	Q =	599.13
SECTION (1) RIGHT HAND INSIDE				DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP

1XE8C0B)

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X/CP

ALPHA (2) = - .007

BETA (1) = - 3.899

MACH = 1.3961

Q = 598.93

P = 439.00

RN/L = 2.9179

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X/CP

ALPHA (2) = - .031

BETA (2) = .155

MACH = 1.3961

Q = 598.93

P = 439.00

RN/L = 2.9179

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X/CP

ALPHA (2) = - .036

BETA (3) = 4.218

MACH = 1.3961

Q = 598.93

P = 439.00

RN/L = 2.9179

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X/CP

ALPHA (3) = 3.849

BETA (1) = - 3.939

MACH = 1.3959

Q = 599.13

P = 439.24

RN/L = 2.9205

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X/CP

ALPHA (3) = 3.849

BETA (1) = - 3.939

MACH = 1.3959

Q = 599.13

P = 439.24

RN/L = 2.9205

DATE : 14 FEB 76

TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

(XEBK08)

ALPHA (3) = 3.967 BETA (2) = .154 MACH = 1.3959 Q = 599.13 P = 439.24 RNL = 2.9206

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .317C .4120 .5070 .6020 .6970 .7920

X/CV .709 -.6531 -.6353 -.6411 -.6492 -.6452 -.6287

.757 -.6332 -.6356 -.6454 -.6511 .0000 -.6291

.805 -.6339 -.6355 -.6470 -.6532 -.6403 -.6301

.867 -.6346 -.6355 -.6482 -.6480 -.6394 -.6221

.953 -.6349 -.6505 -.6482 -.6473 -.6382 -.6246

ALPHA (3) = 3.885 BETA (3) = 4.208 MACH = 1.3959 Q = 599.13 P = 439.24 RNL = 2.9206

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .317C .4120 .5070 .6020 .6970 .7920

X/CV .728 -.6523 -.6316 -.6381 -.6548 -.6445 -.6238

.757 -.6316 -.6338 -.6450 -.6586 .0000 -.6232

.805 -.6319 -.6333 -.6474 -.6595 -.6405 -.6259

.867 -.6314 -.6454 -.6524 -.6512 -.6402 -.6265

.958 -.6321 -.6526 -.6545 -.6514 -.6369 -.6078

ALPHA (4) = -.868 BETA (1) = -.3.901 MACH = 1.3952 Q = 599.12 P = 439.71 RNL = 2.9176

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .317D .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6491 -.6385 -.6395 -.6517 -.6469 -.6290

.757 -.6344 -.6335 -.6443 -.6585 .0000 -.6283

.805 -.6309 -.6336 -.6464 -.6583 -.6412 -.6283

.867 -.6315 -.6487 -.6479 -.6514 -.6417 -.6229

.958 -.6312 -.6528 -.6488 -.6519 -.6405 -.6226

ALPHA (4) = 7.941 BETA (2) = .144 MACH = 1.3952 Q = 599.12 P = 439.71 RNL = 2.9176

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .317D .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6443 -.6276 -.6339 -.6435 -.6416 -.6214

.757 -.6294 -.6265 -.6378 -.6450 .0000 -.6211

.805 -.6259 -.6286 -.6398 -.6488 -.6350 -.6223

.867 -.6266 -.6418 -.6407 -.6426 -.6354 -.6272

.958 -.6262 -.6419 -.6419 -.6431 -.6352 -.6185

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TABULATED PRESSURE DATA - OA148 / AMES 11-073-1)

ALPHA (6) = 15.905 BETA (1) = -3.863 MACH = 1.3948 Q = 599.11 P = 439.94 RNL = 2.9186
 AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6308	-.6198	-.6258	-.6349	-.6296	-.6105
.757	-.6171	-.6195	-.6292	-.6354	-.6000	-.6105
.805	-.6167	-.6200	-.6316	-.6382	-.6230	-.6105
.887	-.6175	-.6345	-.6335	-.6320	-.6218	-.6137
.968	-.6186	-.6388*	-.6358	-.6304	-.6165	-.6079

ALPHA (6) = 15.918 BETA (2) = .144 MACH = 1.3948

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6189	-.6391	-.6385	-.6490	-.6456	-.6313
.757	-.6379	-.6384	-.6394	-.6497	-.0000	-.6313
.805	-.6355	-.6374	-.6432	-.6530	-.6416	-.6299
.887	-.6374	-.6459	-.6458	-.6487	-.6428	-.6325
.968	-.6365	-.6497	-.6475	-.6462	-.6418	-.6236

ALPHA (6) = 15.908 BETA (3) = .4250 MACH = 1.3948

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6207	-.6173	-.6205	-.6360	-.6157	-.5931
.757	-.6125	-.6176	-.6241	-.6320	-.0000	-.5928
.805	-.6119	-.6180	-.6277	-.6298	-.6150	-.5957
.887	-.6137	-.6274	-.6303	-.6272	-.6162	-.6025
.968	-.6137	-.6293	-.6312	-.6274	-.6150	-.6013

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(XECR08)

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TABULATED PRESSURE DATA - 9A14B (AMES 11-073-1)

PAGE 618N

ALPHA (2) = .013 BETA (1) = -3.903 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0283

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.708 -.7362 -.7265 -.7330 -.7459 -.7368 -.7092

.757 -.7239 -.7269 -.7335 -.7440 .0000 -.7073

.805 -.7219 -.7278 -.7404 -.7421 -.7304 -.7097

.857 -.7252 -.7359 -.7416 -.7442 -.7321 -.7123

.909 -.7219 -.7379 -.7430 -.7430 -.7295 -.7010

ALPHA (2) = .017 BETA (2) = .152 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0283

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.708 -.7275 -.7172 -.7218 -.7394 -.7256 -.6951

.757 -.7108 -.7146 -.7261 -.7380 .0000 -.6943

.805 -.7095 -.7172 -.7289 -.7313 -.7168 -.6955

.857 -.7117 -.7324 -.7339 -.7323 -.7123 -.7031

.909 -.7162 -.7377 -.7390 -.7311 -.7125 -.6979

ALPHA (2) = .013 BETA (3) = 4.217 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0283

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.708 -.7380 -.7289 -.7341 -.7510 -.7331 -.7157

.757 -.7235 -.7336 -.7372 -.7434 .0000 -.7183

.805 -.7255 -.7359 -.7396 -.7424 -.7360 -.7219

.857 -.7272 -.7425 -.7439 -.7443 -.7341 -.7202

.909 -.7289 -.7476 -.7434 -.7427 -.7224 -.6984

ALPHA (3) = 3.907 BETA (1) = -3.907 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0276

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.708 -.7053 -.7112 -.7288 -.7121 -.6826

.757 -.6555 -.7334 -.7145 -.7254 .0000 -.6857

.805 -.6257 -.7553 -.7176 -.7217 -.7057 -.6914

.857 -.6337 -.716 -.7231 -.7264 -.7052 -.6894

.909 -.6329 -.7177 -.7285 -.7241 -.6933 -.6698

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R OPS SPEED BRAKE
 $\alpha_{\text{LPH}} (3) = 3.937 \quad \beta_{\text{TA}} (2) = .148 \quad MACH = 1.2463 \quad 0 = 599.67 \quad P = 551.57 \quad RNL = 3.0275$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .729 -.6472 -.6345 -.6422 -.6584 -.6511 -.6157

.757 -.6338 -.6444 -.6508 -.6575 -.6000 -.6262

.625 -.6555 -.6455 -.6556 -.5937 -.6446 -.6286

.887 -.5281 -.6569 -.6597 -.6580 -.6356 -.6285

.963 -.6291 -.6621 -.6554 -.6458 -.6315 -.6161

$\alpha_{\text{LPH}} (3) = 3.911 \quad \beta_{\text{TA}} (3) = 4.207 \quad MACH = 1.2463 \quad 0 = 599.67 \quad P = 551.57 \quad RNL = 3.0276$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .718 -.7057 -.7132 -.7309 -.7065 -.6870

.757 -.6993 -.7060 -.7159 -.7259 .0000 -.6829

.887 -.7055 -.7053 -.7242 -.7230 -.7072 -.6843

.963 -.6555 -.7156 -.7304 -.7254 -.6991 -.6893

.7019 -.7235 -.7371 -.7182 -.5939 -.6758

$\alpha_{\text{LPH}} (4) = 7.933 \quad \beta_{\text{TA}} (4) = -3.903 \quad MACH = 1.2463 \quad 0 = 599.67 \quad P = 551.57 \quad RNL = 3.0282$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .729 -.6789 -.6734 -.6813 -.7019 -.6903 -.6546

.757 -.6672 -.6722 -.6858 -.6987 .0000 -.6562

.887 -.6522 -.6702 -.6930 -.6944 -.6851 -.6560

.963 -.6763 -.6863 -.6981 -.7039 -.6837 -.6605

.563 -.5727 -.6837 -.7037 -.5994 -.5744 -.6334

$\alpha_{\text{LPH}} (4) = 7.882 \quad \beta_{\text{TA}} (2) = -143 \quad MACH = 1.2463 \quad 0 = 599.67 \quad P = 551.57 \quad RNL = 3.0282$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .729 -.5651 -.5642 -.5592 -.5892 -.5783 -.5487

.757 -.5593 -.5537 -.5756 -.5849 -.0000 -.5515

.887 -.5635 -.5635 -.5821 -.5723 -.5582

.963 -.5693 -.5739 -.5998 -.5997 -.5716 -.5560

.5693 -.5732 -.5919 -.5854 -.5639 -.5533

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(XEG09)

(XEG09)

(XEG09)

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TABULATED PRESSURE DATA - DATA 11-073-1

AMES 11-0731(148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA = 7.857 BETA (3) = 4.208 MACH = 1.2463 Q = 593.67 P = 551.57 RNL = 3.2282

SECTION 1: RIGHT HAND SIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

ALPHA (5) = 11.893 BETA (1) = -3.885 MACH = 1.2447 Q = 599.41 P = 552.74 RNL = 3.0279

SECTION 1: RIGHT HAND SIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

ALPHA (5) = 11.893 BETA (2) = -145 MACH = 1.2447 Q = 599.41 P = 552.74 RNL = 3.0279

SECTION 1: RIGHT HAND SIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

ALPHA (5) = 11.893 BETA (3) = 4.220 MACH = 1.2447 Q = 599.41 P = 552.74 RNL = 3.0279

SECTION 1: RIGHT HAND SIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

.159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

.159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

.159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

.159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

.159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

.159 -.157 -.155 -.153 -.151 -.149

.157 -.155 -.153 -.151 -.149 -.147
.155 -.153 -.151 -.149 -.147 -.145
.153 -.151 -.149 -.147 -.145 -.143
.151 -.149 -.147 -.145 -.143 -.141
.149 -.147 -.145 -.143 -.141 -.139

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

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(XEBK10) (13 AUG 75)

REFERENCE DATA

SPEC	=	2690.0000	SQ.FT.	XNRP	=	1076.6860	IN. X0
UFER	=	.474.8000	IN.	YNRP	=	.0000	IN. Y0
EFER	=	.535.0590	IN.	ZNRP	=	.375.0000	IN. Z0
SCALE	=	.3200					

ALPHA (1) = -4.0337 BETA (1) = -3.893 MACH = 1.0977

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.6525 -.6571 -.6607 -.6953 -.6748 -.6207

.757 -.6532 -.6585 -.5798 -.6884 -.0000 -.6216

.825 -.6439 -.6638 -.6788 -.6929 -.6487 -.6291

.987 -.5559 -.5765 -.6924 -.6793 -.6494 -.6343

.968 -.6526 -.5835 -.6972 -.6788 -.6406 -.6843

ALPHA (1) = -4.0335 BETA (2) = .155 MACH = 1.0977

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .728 -.6520 -.5068 -.6653 -.6803 -.6767 -.6333

.757 -.6495 -.6590 -.6586 -.6850 -.0000 -.6385

.805 -.6535 -.6630 -.6750 -.6710 -.6605 -.6476

.887 -.6524 -.6710 -.6820 -.6784 -.6595 -.6516

.958 -.6630 -.6748 -.6872 -.6722 -.6524 -.6427

ALPHA (1) = -4.042 BETA (3) = 4.235 MACH = 1.0977

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .728 -.5371 -.6431 -.6634 -.6915 -.6569 -.6156

.757 -.5386 -.6479 -.6585 -.6772 -.0000 -.6301

.825 -.6333 -.6458 -.6700 -.6662 -.6502 -.6275

.897 -.6455 -.6555 -.6763 -.6724 -.6421 -.6281

.953 -.5583 -.6797 -.6849 -.6650 -.6375 -.6262

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

ALPHA (2) = .020 BETA (1) = -3.899 MACH = 1.0996 Q = 598.85 P = 707.64 RN/L = 3.1885

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6216	-.6278	-.6412	-.6689	-.6519	-.5973
.757	-.6226	-.6278	-.6481	-.5605	.0000	-.6028
.805	-.6235	-.6281	-.6543	-.6319	-.6056	
.887	-.6302	-.6511	-.6624	-.6577	-.6309	-.6100
.968	-.6324	-.6652	-.6593	-.6526	-.6228	-.6026

ALPHA (2) = .025 BETA (2) = .152 MACH = 1.0996 Q = 598.85 P = 707.64 RN/L = 3.1885

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.5930	-.5951	-.6069	-.6300	-.6188	-.5738
.757	-.5894	-.5261	-.6116	-.6193	.0000	-.5800
.805	-.5940	-.5985	-.6197	-.6157	-.6078	-.5835
.887	-.5947	-.6183	-.6254	-.6233	-.6047	-.5883
.968	-.5997	-.6314	-.5283	-.6157	-.5016	-.5895

ALPHA (2) = .023 BETA (3) = 4.214 MACH = 1.0996 Q = 598.85 P = 707.64 RN/L = 3.1885

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6231	-.6238	-.6392	-.6616	-.6442	-.5969
.757	-.6173	-.6248	-.6439	-.6564	.0000	-.6028
.805	-.6226	-.6327	-.6494	-.6463	-.6344	-.6119
.887	-.6257	-.6359	-.6609	-.6559	-.6320	-.6040
.968	-.6267	-.6519	-.6607	-.6523	-.6200	-.5980

ALPHA (3) = 3.934 BETA (1) = -3.903 MACH = 1.0985 Q = 598.82 P = 708.59 RN/L = 3.1905

SECTION : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6433	-.6502	-.6600	-.6894	-.6755	-.6209
.757	-.6428	-.6507	-.6600	-.6855	.0000	-.6264
.805	-.6454	-.6533	-.6700	-.6729	-.6588	-.6290
.887	-.6492	-.6690	-.6805	-.6848	-.6562	-.6288
.968	-.6555	-.6815	-.6927	-.6801	-.6500	-.6110

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -110A/B/C/R ORB SPEED BRAKE

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$$\text{ALPHA (3)} = 3.940 \quad \text{BETA (2)} = -1.149 \quad \text{MACH} = 1.0985 \quad 0 = 598.62 \quad P = 708.59 \quad RN/L = 3.1905$$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$$\text{X/CV} \quad .708 \quad -.5817 \quad -.5896 \quad -.6037 \quad -.6259 \quad -.6099 \quad -.5702 \\ .757 \quad -.5844 \quad -.5930 \quad -.6023 \quad -.6207 \quad -.6000 \quad -.5721 \\ .805 \quad -.5849 \quad -.5928 \quad -.6142 \quad -.6166 \quad -.6051 \quad -.5791 \\ .887 \quad -.5887 \quad -.6138 \quad -.6176 \quad -.6238 \quad -.6046 \quad -.5813 \\ .958 \quad -.5925 \quad -.6103 \quad -.6247 \quad -.6214 \quad -.5977 \quad -.5755$$

$$\text{ALPHA (3)} = 3.944 \quad \text{BETA (3)} = 4.204 \quad \text{MACH} = 1.0985 \quad 0 = 598.62 \quad P = 708.59 \quad RN/L = 3.1905$$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$$\text{X/CV} \quad .708 \quad -.6265 \quad -.6273 \quad -.6386 \quad -.6766 \quad -.6572 \quad -.6008 \\ .757 \quad -.6242 \quad -.6309 \quad -.6496 \quad -.6701 \quad -.6000 \quad -.6075 \\ .805 \quad -.6295 \quad -.6309 \quad -.5559 \quad -.6608 \quad -.6467 \quad -.6139 \\ .887 \quad -.6270 \quad -.6496 \quad -.6654 \quad -.6639 \quad -.6407 \quad -.6200 \\ .958 \quad -.6318 \quad -.6635 \quad -.6768 \quad -.6661 \quad -.6345 \quad -.6087$$

$$\text{ALPHA (4)} = 7.882 \quad \text{BETA (1)} = -3.899 \quad \text{MACH} = 1.0980 \quad 0 = 598.61 \quad P = 709.30 \quad RN/L = 3.1901$$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$$\text{X/CV} \quad .708 \quad -.6491 \quad -.6505 \quad -.6606 \quad -.6931 \quad -.6755 \quad -.6257 \\ .757 \quad -.6498 \quad -.6529 \quad -.6654 \quad -.6929 \quad -.6000 \quad -.6319 \\ .805 \quad -.6520 \quad -.6553 \quad -.5755 \quad -.6812 \quad -.6789 \quad -.6358 \\ .887 \quad -.6529 \quad -.6553 \quad -.6841 \quad -.6933 \quad -.6702 \quad -.6389 \\ .958 \quad -.6556 \quad -.6583 \quad -.6561 \quad -.5588 \quad -.6632 \quad -.6154$$

$$\text{ALPHA (4)} = 7.887 \quad \text{BETA (2)} = -1.144 \quad \text{MACH} = 1.0980 \quad 0 = 598.61 \quad P = 709.30 \quad RN/L = 3.1901$$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\text{X/CV} \quad .708 \quad -.5927 \quad -.5925 \quad -.6030 \quad -.6331 \quad -.6085 \quad -.5720 \\ .757 \quad -.6246 \quad -.5929 \quad -.6264 \quad -.6250 \quad -.0000 \quad -.5720 \\ .805 \quad -.6268 \quad -.5947 \quad -.5162 \quad -.6198 \quad -.6097 \quad -.5796 \\ .887 \quad -.6223 \quad -.5938 \quad -.6236 \quad -.6238 \quad -.6092 \quad -.5827 \\ .958 \quad -.6347 \quad -.6173 \quad -.6286 \quad -.6262 \quad -.6016 \quad -.5695$$

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE
ALPHA (4) = 7.989 BETA (3) = 4.206 MACH = 1.0980 0 0 = 598.61

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6183 -.6276 -.6345 -.6755 -.6440 -.6005
.757 -.6175 -.6266 -.6461 -.6683 -.6005 -.6027
.805 -.6144 -.6336 -.6550 -.6562 -.6435 -.6147
.897 -.6190 -.6557 -.6679 -.6662 -.6430 -.6218
.969 -.6204 -.6651 -.6750 -.6690 -.6395 -.6127

ALPHA (5) = 11.921 BETA (1) = -3.873 MACH = 1.0991 0 0 = 599.16 P = 708.60 RNL = 3.1919

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6568 -.6527 -.6621 -.6986 -.6692 -.6267
.757 -.6595 -.6566 -.6565 -.6900 -.0000 -.6303
.805 -.6520 -.6558 -.6750 -.6759 -.6725 -.6363
.587 -.6560 -.6550 -.6903 -.6891 -.6723 -.6286
.969 -.6630 -.6791 -.6952 -.6898 -.6637 -.6130

ALPHA (5) = 11.930 BETA (2) = .145 MACH = 1.0991 0 0 = 599.16 P = 708.60 RNL = 3.1919

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6101 -.6134 -.6197 -.6584 -.6333 -.5225
.757 -.6094 -.6154 -.6262 -.6262 -.0000 -.5937
.825 -.6154 -.6182 -.6398 -.6452 -.6336 -.6035
.927 -.6120 -.6321 -.6424 -.6521 -.6335 -.6041
.959 -.6230 -.5400 -.6529 -.6491 -.6312 -.5846

ALPHA (5) = 11.928 BETA (3) = 4.214 MACH = 1.0991 0 0 = 599.16 P = 708.60 RNL = 3.1919

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5333 -.6409 -.6493 -.6956 -.6565 -.6092
.757 -.6254 -.6431 -.6603 -.6825 .0000 -.6164
.825 -.6337 -.6457 -.6629 -.6720 -.6641 -.6302
.687 -.6306 -.6592 -.6810 -.6769 -.6584 -.6406
.959 -.6252 -.6822 -.6877 -.6775 -.6579 -.6327

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

(XEBK11) (13 AUG 75)

REFERENCE DATA

SREF = 2530.0000 SQ.FT. XMRP = 1076.6800 IN. XO
 LREF = .474.8000 IN. YMRP = .0000 IN. YO
 BREF = 936.0680 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .3300

ALPHA (1) = -4.057 BETA (1) = -3.873 MACH = .90043 Q = 600.11 P = 1057.3 RNL = 3.5778

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.4007	-.4177	-.4261	-.4509	-.4180	-.3763
	-.757	-.3983	-.4193	-.4342	-.4562	-.0000	-.3820
	.655	-.4074	-.4235	-.4390	-.4416	-.4176	-.3758
	.237	-.4146	-.4395	-.4629	-.4481	-.4156	-.3860
	.368	-.4201	-.4516	-.4614	-.4485	-.4190	-.3821

ALPHA (1) = -4.047 BETA (2) = .148 MACH = .90043 Q = 600.11 P = 1057.3 RNL = 3.5778

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.3849	-.3940	-.4134	-.4435	-.4125	-.3758
	-.757	-.3842	-.4031	-.4242	-.4327	-.0000	-.3719
	.805	-.3873	-.4084	-.4287	-.4232	-.4091	-.3836
	.887	-.3945	-.4169	-.4347	-.4339	-.4082	-.3931
	.958	-.4036	-.4288	-.4425	-.4270	-.4029	-.3766

ALPHA (1) = -4.057 BETA (3) = 4.239 MACH = .90043 Q = 600.11 P = 1057.3 RNL = 3.5778

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.3904	-.4031	-.4300	-.4578	-.4173	-.3819
	-.757	-.3959	-.4135	-.4376	-.4519	-.0010	-.3804
	.805	-.4027	-.4259	-.4407	-.4491	-.4176	-.3852
	.887	-.4081	-.4322	-.4523	-.4493	-.4195	-.3930
	.958	-.4132	-.4543	-.4593	-.4459	-.4114	-.3791

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TABULATED PRESSURE DATA - OAHB (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE
 $\Delta\text{ALPHA} (2) = .016 \quad \text{BETA} (1) = -3.906 \quad \text{MACH} = .89947 \quad 0 = 599.39 \quad P = 1059.3 \quad RNL = 3.5741$
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/C/V

.708 -.4077 -.4134 -.4313 -.4693 -.4452 -.3877
 .757 -.4093 -.4225 -.4492 -.4628 -.0000 -.3977
 .805 -.453 -.4302 -.4554 -.4573 -.4116 -.3898
 .887 -.4304 -.4560 -.4688 -.4725 -.4069 -.4069
 .968 -.4352 -.4710 -.4791 -.4697 -.4385 -.3898
 .369 -.4352 -.4710 -.4791 -.4697 -.4385 -.3898

ALPHA (2) = .014 BETA (2) = -1.39 MACH = .89947 0 = 599.39 P = 1059.3 RNL = 3.5741

SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/C/V

.708 -.3958 -.4006 -.4259 -.4622 -.4278 -.3807
 .757 -.4011 -.4002 -.4367 -.4397 -.0016 -.3922
 .805 -.4052 -.4090 -.4462 -.4423 -.4282 -.3927
 .887 -.402 -.4260 -.4497 -.4540 -.4309 -.3898
 .968 -.4141 -.4370 -.4619 -.4521 -.4201 -.3788

ALPHA (2) = .024 BETA (3) = -4.226 MACH = .89947 0 = 599.39 P = 1059.3 RNL = 3.5741

SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/C/V

.708 -.4046 -.4271 -.4368 -.4732 -.4234 -.3888
 .757 -.4175 -.4223 -.4510 -.4622 -.5026 -.4104
 .805 -.4175 -.4256 -.4553 -.4605 -.5057 -.4038
 .887 -.4180 -.4428 -.4749 -.4916 -.4844 -.4174
 .968 -.4290 -.4510 -.4761 -.4625 -.4279 -.3647

ALPHA (2) = .024 BETA (1) = -3.911 MACH = .89947 0 = 599.47 P = 1059.2 RNL = 3.5748

SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/C/V

.708 -.4182 -.4416 -.4622 -.5026 -.4524 -.4104
 .757 -.4227 -.4349 -.4730 -.4730 -.0000 -.4038
 .805 -.4227 -.4510 -.4916 -.4844 -.4844 -.4174
 .887 -.4553 -.4755 -.4967 -.4967 -.4967 -.4194
 .968 -.4515 -.5063 -.5016 -.4622 -.4622 -.4093

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(XEBK11)

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE (XEBK!!)						
SECTION 1:RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.709	-.3977	-.4018	-.4181	-.4575	-.4281	-.3867
.757	-.4092	-.4077	-.4248	-.4602	-.4000	-.3659
.805	-.4055	-.4206	-.4417	-.4440	-.4398	-.4007
.887	-.4C37	-.4418	-.4469	-.4543	-.4271	-.4058
.958	-.4159	-.4598	-.4638	-.4540	-.4298	-.3912
ALPHA (3) = 3.940	BETA (3) = 4.207	MACH = .69917	O = 599.47	P = 1059.2	RNL = 3.5758	
SECTION 1:RIGHT HAND INSIDE						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.4110	-.4328	-.4515	-.4913	-.4284	-.4022
.757	-.4194	-.4347	-.4598	-.4956	-.0000	-.4022
.805	-.4293	-.4385	-.4682	-.4772	-.4539	-.4050
.887	-.4254	-.4627	-.4880	-.4819	-.4405	-.4088
.958	-.4374	-.4773	-.5006	-.4784	-.4477	-.3954
ALPHA (4) = 7.890	BETA (1) = -3.900	MACH = .69940	O = 599.79	P = 1059.2	RNL = 3.5750	
SECTION 1:RIGHT HAND INSIDE						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.4536	-.4703	-.4878	-.5450	-.4750	-.4345
.757	-.4581	-.4653	-.5024	-.5413	-.0000	-.4395
.805	-.4679	-.4830	-.5186	-.5203	-.4957	-.4435
.887	-.4715	-.5255	-.5257	-.5376	-.4576	-.4309
.958	-.4873	-.5279	-.5469	-.5412	-.4881	-.4192
ALPHA (4) = 7.894	BETA (2) = .145	MACH = .69940	O = 599.79	P = 1059.2	RNL = 3.5750	
SECTION 1:RIGHT HAND INSIDE						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.4141	-.4292	-.4579	-.4911	-.4401	-.4079
.757	-.4216	-.4254	-.4627	-.4930	-.0000	-.4084
.805	-.4273	-.4412	-.4841	-.4665	-.4648	-.4136
.887	-.4371	-.4577	-.4851	-.4970	-.4627	-.4096
.958	-.4376	-.4761	-.5018	-.4913	-.4548	-.3993

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (4) = .7.892 BETA (3) = 4.20° MACH = .89340 Q = 599.79 P = 1059.2 RN/L = 3.5790

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.4458 -.4598 -.4811 -.287 -.4616 -.4339
.757 -.4458 -.4614 -.4863 -.592 .0000 -.4258
.805 -.4565 -.4554 -.5015 -.5082 -.4939 -.4210
.857 -.4626 -.4919 -.5127 -.5301 -.4865 -.4321
.968 -.4664 -.5185 -.5316 -.5199 -.4803 -.4165

ALPHA (5) = 11.932 BETA (1) = -3.88° MACH = .89887 Q = 599.34 P = 1059.7 RN/L = 3.5747

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .706 -.4939 -.5035 -.5300 -.5777 -.5347 -.4700
.757 -.4897 -.5093 -.5363 -.5761 .0000 -.4604
.805 -.5035 -.5146 -.5562 -.5531 -.5278 -.4604
.887 -.5007 -.5358 -.5857 -.5714 -.5161 -.4635
.968 -.5131 -.5684 -.5924 -.5755 -.5133 -.4605

ALPHA (5) = 11.939 BETA (2) = 1.43° MACH = .89887 Q = 599.34 P = 1059.7 RN/L = 3.5747

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.4512 -.4748 -.4915 -.5536 -.4696 -.4496
.757 -.4696 -.4827 -.5077 -.5505 .0000 -.4443
.805 -.4777 -.4906 -.5262 -.5310 -.5052 -.4481
.887 -.4803 -.5126 -.5523 -.5452 -.4938 -.4460
.968 -.4856 -.5502 -.5589 -.5436 -.4936 -.4321

ALPHA (5) = 11.938 BETA (3) = 4.228 MACH = .89887 Q = 599.34 P = 1059.7 RN/L = 3.5747

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.4773 -.4845 -.5281 -.5734 -.4945 -.4476
.757 -.4792 -.4953 -.5355 -.5610 .0000 -.4486
.805 -.4862 -.5236 -.5443 -.5357 -.5210 -.4567
.887 -.4979 -.5522 -.5750 -.5762 -.5143 -.4903
.968 -.4955 -.5766 -.5855 -.5636 -.5100 -.4720

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

	XMRP	YMRP	ZMRP	IN. X0	IN. Y0	IN. Z0
SPRF	.6320 .2000 SC.FT.			.1076 .6300		
SPRF	.474 .8600 IN.			.0000		
SPRF	.355 .3600 IN.			.375 .0000		
SCALE	.5200					

A_BETA(1) = -4.357 BETA(1) = -7.989 MACH = .59636 Q = 593.96 P = 2385.7 RNL = 4.8160

SECTION - 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B .3170 .4120 .5070 .6020 .6970 .7920

X/C .758 -.4379 -.5177 -.5493 -.6000 -.4812 -.4276

.757 -.5257 -.5747 -.5725 .0000 -.4358

.815 -.5415 -.5842 -.5469 -.5135 -.4360

.651 -.5624 -.5935 -.5751 -.4927 -.4267

.368 -.5324 -.5026 -.5651 -.5025 -.4215

A_BETA(1) = -4.335 BETA(1) = -3.874 MACH = .59636 Q = 593.96 P = 2385.7 RNL = 4.8160

SECTION - 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B .3170 .4120 .5070 .6020 .6970 .7920

X/C .758 -.4450 -.4741 -.4973 -.5289 -.4470 -.4044

.757 -.4497 -.4603 -.5181 -.5143 .0000 -.3943

.805 -.4507 -.4779 -.5236 -.4949 -.4750 -.3965

.651 -.4712 -.5183 -.5428 -.5332 -.4614 -.3967

.358 -.4836 -.5238 -.5605 -.5207 -.4638 -.3782

A_BETA(1) = -4.017 BETA(1) = .163 MACH = .59636 Q = 593.96 P = 2385.7 RNL = 4.8160

SECTION - 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B .3170 .4120 .5070 .6020 .6970 .7920

X/CV .758 -.4117 -.4616 -.4904 -.5316 -.4351 -.3836

.757 -.4239 -.4602 -.5057 -.5234 .0000 -.3942

.805 -.4238 -.4602 -.5160 -.5221 -.4645 -.3968

.651 -.4517 -.4817 -.5297 -.5139 -.4610 -.3836

.358 -.4532 -.5127 -.5270 -.4985 -.4545 -.3693

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-0731(OA148) -140A/B/C/R ORB SPEED BRAKE

ALPHA (1) = -4.026 BETA (4) = 4.234 MACH = .593636 Q = 593.96 P = 2385.7 RN/L = 4.8160

SECTION : 1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.4272 -.4470 -.4903 -.5274 -.4366 -.3828

.757 -.4384 -.4621 -.5092 -.5202 -.0000 -.3921

.805 -.4475 -.4742 -.5204 -.4840 -.4556 -.2923

.887 -.4594 -.5014 -.5355 -.5135 -.4522 -.3783

.958 -.4642 -.5311 -.5458 -.5020 -.4467 -.3683

ALPHA (1) = -4.040 BETA (5) = 8.307 MACH = .596356 Q = 593.96 P = 2385.7 RN/L = 4.8160

SECTION : 1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.4700 -.5116 -.5459 -.5558 -.4704 -.4155

.757 -.4925 -.5156 -.5689 -.5319 -.3000 -.4186

.805 -.4994 -.5239 -.5784 -.5248 -.4852 -.4227

.887 -.5094 -.5575 -.5904 -.5547 -.4902 -.4101

.958 -.5414 -.5935 -.5665 -.5319 -.4663 -.3963

ALPHA (2) = .047 BETA (1) = -7.924 MACH = .59554 Q = 594.31 P = 2385.7 RN/L = 4.8134

SECTION : 1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.709 -.5396 -.5721 -.6169 -.6577 -.5231 -.4450

.757 -.5654 -.5761 -.6313 -.6524 -.0000 -.4572

.805 -.5534 -.5992 -.6610 -.6153 -.5652 -.4501

.887 -.5756 -.6127 -.6703 -.6206 -.5518 -.4603

.958 -.5988 -.6656 -.6828 -.6186 -.5420 -.4496

ALPHA (2) = .057 BETA (2) = -3.897 MACH = .59654 Q = 594.31 P = 2385.7 RN/L = 4.8134

SECTION : 1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.4628 -.4876 -.5225 -.5771 -.4704 -.4225

.757 -.4649 -.4943 -.5333 -.5580 -.0020 -.4206

.805 -.4871 -.5205 -.5520 -.5328 -.5079 -.4255

.887 -.4993 -.5311 -.5630 -.5580 -.4939 -.4125

.958 -.5260 -.5751 -.5843 -.5431 -.4895 -.3920

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TASULATED PRESSURE DATA - DATA'S (AMES 11-073-1)

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AMES 11-07310A148) - 140A/B/C/R ORB SPEED BRAKE
ALPHA = 31 = 3.958 BETA (2) = -3.898 MACH = .59690 0 = 595.02 P = 2385.7 RNL = 4.8205

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X/CY

.738 -.4793 -.5064 -.5496 -.6053 -.4885 -.4299
.757 -.4910 -.5100 -.5828 -.5813 -.0000 -.4297
.825 -.4969 -.5243 -.5807 -.5513 -.5152 -.4206
.897 -.5152 -.5592 -.5957 -.5773 -.5136 -.4205
.959 -.5125 -.5023 -.6134 -.5597 -.5059 -.4045

ALPHA = 31 = 2.957 BETA (3) = .162 MACH = .59690 0 = 595.02 P = 2385.7 RNL = 4.8205

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X/CY

.758 -.5595 -.5025 -.5224 -.5838 -.4768 -.4235
.751 -.511 -.5845 -.5461 -.5764 -.0000 -.4178
.825 -.511 -.5071 -.5603 -.5482 -.5124 -.4196
.887 -.4938 -.5366 -.5613 -.5489 -.4249 -.4180
.959 -.4978 -.5575 -.5806 -.5673 -.4310 -.4080

ALPHA = 31 = 2.354 BETA (4) = 4.202 MACH = .59639 0 = 595.02 P = 2385.7 RNL = 4.8205

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X/CY

.738 -.4586 -.4932 -.5303 -.5699 -.4693 -.4638
.757 -.4779 -.4963 -.5715 -.5749 -.0000 -.4141
.825 -.5174 -.531 -.5926 -.5364 -.4975 -.4038
.887 -.5007 -.5118 -.5825 -.5613 -.4860 -.4028
.959 -.5143 -.5323 -.5338 -.5479 -.4798 -.3702

ALPHA = 31 = 3.955 BETA (5) = 8.252 MACH = .59690 0 = 595.02 P = 2385.7 RNL = 4.8205

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X/CY

.738 -.5118 -.5376 -.6324 -.6623 -.5318 -.4429
.757 -.5325 -.5325 -.5651 -.6561 -.0000 -.4350
.825 -.515 -.515 -.5351 -.5255 -.5460 -.4384
.887 -.5213 -.5213 -.5644 -.6377 -.5386 -.4346
.959 -.5241 -.5241 -.5639 -.6196 -.5163 -.3880

ALPHA = 31 = 3.958 BETA (6) = 10.252 MACH = .59690 0 = 595.02 P = 2385.7 RNL = 4.8205

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X/CY

.738 -.5118 -.5376 -.6324 -.6623 -.5318 -.4429
.757 -.5325 -.5325 -.5651 -.6561 -.0000 -.4350
.825 -.515 -.515 -.5351 -.5255 -.5460 -.4384
.887 -.5213 -.5213 -.5644 -.6377 -.5386 -.4346
.959 -.5241 -.5241 -.5639 -.6196 -.5163 -.3880

(XEB:12)

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Curve 1 - ECA 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE
 $\alpha = 7.304 \quad \beta = -7.922 \quad MACH = .59690 \quad P = 2385.7 \quad Rn/L = 4.8202$

SECTION 1) PILOT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758	-6156	-6713	-7408	-7708	-8032	-1546
.757	-6382	-6599	-7625	-7725	-9000	-4565
.825	-6425	-7148	-7954	-7054	-6144	-4479
.887	-651	-7370	-8134	-7465	-5977	-4354
.898	-575	-7612	-9239	-7293	-5717	-3701

$\alpha = 7.913 \quad \beta = -3.891 \quad MACH = .59690 \quad P = 2385.7 \quad Rn/L = 4.8202$

SECTION 1) PILOT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.753	-5522	-5172	-5546	-6171	-5361	-4357
.757	-4926	-5123	-5777	-5975	0000	-4392
.825	-5233	-5357	-6133	-5536	-5338	-4383
.887	-5263	-5754	-6150	-5854	-5204	-4300
.898	-5372	-6042	-6343	-5873	-5147	-4176

$\alpha = 7.912 \quad \beta = -1.160 \quad MACH = .59690 \quad P = 2385.7 \quad Rn/L = 4.8202$

SECTION 1) PILOT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758	-4869	-5125	-5495	-5979	-5038	-4393
.757	-4861	-5168	-5647	-5962	0000	-4455
.825	-5035	-5389	-5841	-5640	-5312	-4407
.887	-5173	-5561	-6127	-5957	-5169	-4360
.898	-5244	-5627	-6155	-5783	-5238	-4146

$\alpha = 7.910 \quad \beta = -4.204 \quad MACH = .59690 \quad P = 2385.7 \quad Rn/L = 4.8202$

SECTION 1) PILOT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.759	-4750	-5235	-5533	-5004	-4924	-4286
.757	-4250	-5326	-5839	-5911	0000	-4217
.825	-5255	-5349	-5940	-5491	-5263	-4221
.887	-5241	-5754	-6200	-5603	-5036	-4115
.898	-5283	-6038	-6154	-5725	-4979	-4010

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TABULATED PRESSURE DATA - OA148 (AMES 11-973-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE						
ALPHA (5) = 11.958	BETA (4) = 4.216	MACH = .59660	Q = 591.43	P = 2385.7	RNL = 4.8162	(XEBK12)
SECTION ()RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	-.703	-.5003	-.5377	-.5851	-.6308	-.5112
	-.757	-.5193	-.5424	-.6037	-.6111	-.0000
	-.805	-.5222	-.5603	-.6198	-.5726	-.5449
	-.897	-.5438	-.5892	-.6317	-.6052	-.5394
	-.968	-.5541	-.5323	-.6418	-.5980	-.4209
ALPHA (5) = 11.959	BETA (5) = 8.279	MACH = .59660	Q = 591.43	P = 2385.7	RNL = 4.8162	
SECTION ()RIGHT HAND INSIDE	DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	-.708	-.5858	-.6170	-.6852	-.7080	-.5682
	-.757	-.5942	-.6297	-.7128	-.7049	-.0000
	-.825	-.6189	-.6466	-.7348	-.6576	-.5704
	-.897	-.5373	-.6952	-.7391	-.6760	-.5539
	-.968	-.6571	-.7392	-.7473	-.6483	-.5325

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TABULATED PRESSURE DATA - C.1148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

SREF =	2690.0000	SC.FT.	XMRP =	1076.6800	IN. X0
LREF =	474.8000	IN.	YMRP =	.0000	IN. Y0
BREF =	935.0620	IN.	ZMRP =	375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -4.106 BETA (1) = -3.886 MACH = 1.3945 Q = 599.93 P = 440.65 RNL = 2.9118

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.5575	-.5443	-.5582	-.5580	-.5112	-.4723
	.757	-.5412	-.5450	-.5556	-.5535	.0000	-.4725
	.805	-.5407	-.5467	-.5718	-.5533	.5032	-.4763
	.887	-.5414	-.5604	-.5763	-.5511	-.4975	-.4782
	.968	-.5445	-.5716	-.5772	-.5426	-.4918	-.4851

ALPHA (1) = -4.030 BETA (2) = .154 MACH = 1.3946 Q = 599.93 P = 440.65 RNL = 2.9118

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.703	-.5185	-.5393	-.5558	-.5518	-.5062	-.4765
	.757	-.5359	-.5385	-.5625	-.5451	.0000	-.4739
	.805	-.5331	-.5431	-.5667	-.5435	-.4977	-.4796
	.887	-.5354	-.5593	-.5715	-.5413	-.4922	-.4808
	.968	-.5397	-.5704	-.5703	-.5335	-.4891	-.4849

ALPHA (1) = -4.039 BETA (3) = 4.249 MACH = 1.3946 Q = 599.93 P = 440.65 RNL = 2.9118

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.5538	-.5440	-.5590	-.5590	-.5129	-.4874
	.757	-.5402	-.5450	-.5666	-.5503	.0000	-.4869
	.805	-.5393	-.5512	-.5699	-.5481	.5063	-.4918
	.887	-.5417	-.5636	-.5735	-.5458	.5020	-.4909
	.958	-.5474	-.5712	-.5735	-.5347	-.5018	-.4890

PARAMETRIC DATA

SPDRK =	.000	SPDRK =	35.000
BLFLAP =	.000	L-ELVN =	.000
R-ELVN =	.000	MACH =	1.400

RNL = 2.9118

(13 AUG 75)

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073(0A148) - 140A/B/C/ORB SPEED BRAKE

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ALPHA (2) = -.033 BETA (1) = -3.905 MACH = 1.3950 Q = 599.93 P = 440.41 RN/L = 2.9115 (XEBK13)

SECTION 1;RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.5828	-.5483	-.5617	-.5665	-.5242	-.4791
	.757	-.5459	-.5476	-.5684	-.5624	.0000	-.4777
	.805	-.5442	-.5504	-.5738	-.5622	-.5161	-.4798
	.887	-.5447	-.5648	-.5793	-.5605	-.5109	-.4797
	.969	-.5471	-.5736	-.5810	-.5541	-.5057	-.4819

ALPHA (2) = -.028 BETA (2) = .144 MACH = 1.3950 Q = 599.93 P = 440.41 RN/L = 2.9115 (XEBK13)

SECTION 1;RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.758	-.5552	-.5440	-.5586	-.5624	-.5193	-.4806
	.757	-.5428	-.5454	-.5638	-.5565	.0033	-.4792
	.625	-.5404	-.5478	-.5707	-.5563	-.5121	-.4780
	.887	-.5409	-.5609	-.5767	-.5553	-.5076	-.4759
	.958	-.5440	-.5592	-.5767	-.5473	-.4993	-.4778

ALPHA (2) = -.033 BETA (3) = .4.229 MACH = 1.3950 Q = 599.93 P = 440.41 RN/L = 2.9115 (XEBK13)

SECTION 1;RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.5586	-.5471	-.5630	-.5656	-.5241	-.4914
	.757	-.5455	-.5479	-.5680	-.5595	.0000	-.4895
	.805	-.5433	-.5526	-.5742	-.5600	-.5175	-.4921
	.887	-.5455	-.5561	-.5768	-.5591	-.5127	-.4895
	.969	-.5492	-.5728	-.5782	-.5512	-.5082	-.4926

ALPHA (3) = 3.85! BETA (1) = -3.904 MACH = 1.3941 Q = 600.12 P = 441.12 RN/L = 2.9157 (XEBK13)

SECTION 1;RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7520

X/CV	.758	-.5578	-.5525	-.5543	-.5740	-.5408	-.4936
	.757	-.5521	-.5526	-.5703	-.5714	.0000	-.4875
	.805	-.5493	-.5545	-.5766	-.5721	-.5330	-.4844
	.887	-.5560	-.5638	-.5628	-.5725	-.5278	-.4824
	.958	-.5516	-.5721	-.5840	-.5549	-.5195	-.4812

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE
 $\alpha = 3.949 \quad \beta = 1.21 \quad MACH = 1.3941 \quad 0 = 600.12 \quad P = 441.12 \quad Rn/L = 2.9157$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5616 -.5475 -.5597 -.5690 -.5341 -.4879

.757 -.5478 -.5478 -.5649 -.5652 -.0000 -.4816

.805 -.5442 -.5442 -.5716 -.5664 -.5256 -.4787

.887 -.5440 -.5440 -.5593 -.5777 -.5666 -.5216 -.4728

.958 -.5471 -.5471 -.5578 -.5794 -.5602 -.5147 -.4728

 $\alpha = 3.862 \quad \beta = 1.31 = 4.219 \quad MACH = 1.3941 \quad 0 = 600.12 \quad P = 441.12 \quad Rn/L = 2.9157$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5665 -.5541 -.5670 -.5768 -.5393 -.4883

.757 -.5510 -.5536 -.5732 -.5725 -.0000 -.4809

.805 -.5493 -.5565 -.5789 -.5739 -.5303 -.4774

.887 -.5496 -.5564 -.5855 -.5737 -.5250 -.4783

.958 -.5515 -.5763 -.5879 -.5685 -.5191 -.4736

 $\alpha = 7.881 \quad \beta = 1.11 = -3.904 \quad MACH = 1.3932 \quad 0 = 686.90 \quad P = 441.59 \quad Rn/L = 2.9150$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5764 -.5621 -.5722 -.5819 -.5558 -.5131

.757 -.5625 -.5631 -.5774 -.5800 -.0000 -.5071

.805 -.5602 -.5547 -.5838 -.5807 -.5506 -.5038

.887 -.5598 -.5729 -.5888 -.5802 -.5434 -.5003

.958 -.5509 -.5803 -.5881 -.5738 -.5368 -.4994

 $\alpha = 7.933 \quad \beta = 1.21 = .128 \quad MACH = 1.3932 \quad 0 = 600.00 \quad P = 441.59 \quad Rn/L = 2.9150$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5691 -.5563 -.5687 -.5801 -.5514 -.5042

.757 -.5556 -.5561 -.5730 -.5777 .0000 -.4933

.805 -.5542 -.5577 -.5798 -.5796 -.5443 -.4900

.887 -.5520 -.5684 -.5848 -.5808 -.5381 -.4876

.958 -.5542 -.5758 -.5870 -.5755 -.5315 -.4835

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.5735 -.5597 -.5768 -.5856 -.5514 -.4973

.757 -.5583 -.5590 -.5811 -.5818 .0000 -.4880

.805 -.5571 -.5616 -.5870 -.5827 -.5421 -.4854

.887 -.5559 -.5733 -.5925 -.5832 -.5374 -.4813

.968 -.5573 -.5819 -.5934 -.5804 -.5338 -.4753

ALPHA (5) = 11.884 BETA (1) = -3.887 MACH = 1.3946

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.5836 -.5694 -.5787 -.5903 -.5640 -.5233

.757 -.5691 -.5694 -.5842 -.5863 .0000 -.5166

.805 -.5658 -.5710 -.5908 -.5884 -.5576 -.5128

.887 -.5555 -.5786 -.5970 -.5875 -.5522 -.5087

.958 -.5675 -.5857 -.5956 -.5794 -.5448 -.5087

ALPHA (5) = 11.89! BETA (2) = 152 MACH = 1.3946

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.5784 -.5648 -.5764 -.5802 -.5643 -.5153

.757 -.5655 -.5648 -.5814 -.5895 .0000 -.5039

.805 -.5636 -.5560 -.5875 -.5599 -.5599 -.5039

.887 -.5624 -.5748 -.5337 -.5916 -.5528 -.4962

.958 -.5543 -.5920 -.5963 -.5875 -.5464 -.4940

ALPHA (5) = 11.887 BETA (3) = 4.229 MACH = 1.3946

SECTION (1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.709 -.5850 -.5741 -.5852 -.5849 -.5624 -.5149

.757 -.5715 -.5741 -.5904 -.5911 .0000 -.5080

.805 -.5701 -.5739 -.5961 -.5918 -.5555 -.5040

.887 -.5593 -.5839 -.5989 -.5916 -.5500 -.4977

.959 -.5708 -.5908 -.5995 -.5913 -.5472 -.4920

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

ALPHA (6) = 15.888 BETA (1) = -3.863 MACH = 1.3935 Q = 600.21 P = 441.59 RNL = 2.9216

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.729	-.5974	.5852	-.5965	-.6015	-.5716	-.5355
.757	-.5950	-.5855	-.6020	-.5972	-.0000	-.5332
.805	-.5824	-.5874	-.6074	-.5972	-.5666	-.5325
.867	-.5821	-.6035	-.6105	-.5946	-.5616	-.5353
.958	-.5860	-.6085	-.6079	-.5863	-.5545	-.5333

ALPHA (6) = 15.865 BETA (2) = .152 MACH = 1.3935 Q = 600.21 P = 441.59 RNL = 2.9216

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.729	-.5910	-.5784	-.5897	-.6009	-.5724	-.5243
.757	-.5782	-.5791	-.5952	-.5983	-.0000	-.5159
.805	-.5777	-.5798	-.6018	-.5992	-.5655	-.5126
.867	-.5762	-.5917	-.6061	-.6002	-.5608	-.5127
.958	-.5774	-.5998	-.6079	-.5939	-.5544	-.5108

ALPHA (6) = 15.903 BETA (3) = 4.263 MACH = 1.3935 Q = 600.21 P = 441.59 RNL = 2.9216

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.728	-.5907	-.5859	-.5983	-.5994	-.5703	-.5380
.757	-.5847	-.5862	-.6028	-.5940	-.0000	-.5330
.805	-.5831	-.5883	-.6056	-.5937	-.5641	-.5288
.867	-.5817	-.5993	-.6068	-.5923	-.5582	-.5302
.958	-.5831	-.6028	-.6089	-.5933	-.5501	-.5271

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(XEBK13)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

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(XEFK14) (13 AUG 75)

REFERENCE DATA

SREF =	2590.0000	S2.FT.	XMP2 =	1076.6800	IN. XD	
LREF =	4.74.8000	IN.	YMP2 =	.0000	IN. YD	
BREF =	935.0680	IN.	ZMP2 =	375.0000	IN. ZD	
SCALE =	.0300					

$\text{ALPHA} (1) = -4.010 \quad \text{BETA} (1) = -3.884 \quad \text{MACH} = 1.2452 \quad 0 = 599.70 \quad P = 552.51 \quad RN/L = 3.0159$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.65550 -.6422 -.6595 -.6698 -.6265 -.5647

.757 -.6534 -.6422 -.6595 -.6693 -.0000 -.5514

.825 -.65388 -.6443 -.6788 -.6717 -.6154 -.5481

.867 -.65383 -.6511 -.6886 -.6705 -.6075 -.5450

.568 -.65445 -.6761 -.6924 -.6641 -.5978 -.5386

$\text{ALPHA} (2) = -3.944 \quad \text{BETA} (2) = .148 \quad \text{MACH} = 1.2452 \quad 0 = 599.70 \quad P = 552.51 \quad RN/L = 3.0159$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.65550 -.6422 -.6595 -.6698 -.6265 -.5647

.757 -.6534 -.6422 -.6595 -.6693 -.0000 -.5514

.825 -.65388 -.6443 -.6788 -.6717 -.6154 -.5481

.867 -.65383 -.6511 -.6886 -.6705 -.6075 -.5450

.568 -.65445 -.6761 -.6924 -.6641 -.5978 -.5386

$\text{ALPHA} (3) = -4.009 \quad \text{BETA} (3) = 4.237 \quad \text{MACH} = 1.2452 \quad 0 = 599.70 \quad P = 552.51 \quad RN/L = 3.0159$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.65550 -.6422 -.6595 -.6698 -.6265 -.5647

.757 -.6534 -.6422 -.6595 -.6693 -.0000 -.5514

.825 -.65388 -.6443 -.6788 -.6717 -.6154 -.5481

.867 -.65383 -.6511 -.6886 -.6705 -.6075 -.5450

.568 -.65445 -.6761 -.6924 -.6641 -.5978 -.5386

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TABULATED PRESSURE DATA - DATA 148 (AMES 11-073-1)

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AMES 11-073(DA148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (2) = .205 BETA (1) = -3.866 MACH = 1.2472 Q = 601.31 P = 552.29 RN/L = 3.0212

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.709	-.6725	-.6578	-.6596	-.6937	-.6497	-.5766
.757	-.6547	-.6592	-.6774	-.6925	.0000	-.5595
.805	-.6514	-.6625	-.6913	-.6939	-.6376	-.5579
.853	-.6490	-.6772	-.7039	-.6920	-.6260	-.5515
.901	-.6673	-.6891	-.7077	-.6835	-.6121	-.5458

ALPHA (2) = .220 BETA (2) = .185 MACH = 1.2472 Q = 601.31 P = 552.29 RN/L = 3.0212

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6693	-.6490	-.6628	-.6862	-.6417	-.5773
.757	-.6443	-.6504	-.6730	-.6936	.0210	-.5583
.805	-.6405	-.5633	-.6843	-.6846	-.6265	-.5534
.853	-.6412	-.6703	-.6950	-.6834	-.6187	-.5506
.901	-.6514	-.6919	-.6988	-.6758	-.6092	-.5430

ALPHA (2) = .215 BETA (3) = .4.264 MACH = 1.2472 Q = 601.31 P = 552.29 RN/L = 3.0212

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6745	-.6500	-.5711	-.6919	-.6493	-.5840
.757	-.6555	-.6508	-.6803	-.6898	.0000	-.5688
.805	-.6520	-.6546	-.6915	-.6905	-.6355	-.5660
.853	-.6527	-.6915	-.7024	-.6893	-.6292	-.5646
.901	-.6631	-.6917	-.7054	-.6810	-.6185	-.5574

ALPHA (3) = 3.903 BETA (1) = -3.872 MACH = 1.2473 Q = 600.93 P = 551.82 RN/L = 3.0268

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6730	-.6597	-.6586	-.6909	-.6613	-.5986
.757	-.6575	-.6599	-.6769	-.6890	.0000	-.5826
.805	-.6544	-.6521	-.6881	-.6909	-.6530	-.5792
.853	-.6530	-.6732	-.6954	-.6909	-.6430	-.5749
.901	-.6561	-.6813	-.6961	-.6819	-.6262	-.5727

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TABULATED PRESSURE DATA - OAI148 (AMES 11-073-1)

AMES 11-073(OAI148) -140A/B/C/R ORB SPEED BRAKE

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(XE8K14)

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6529	-.6568	-.6667	-.6930	-.6562	-.5861
.757	-.6545	-.6584	-.6745	-.6927	-.0000	-.5672
.805	-.6511	-.6603	-.6859	-.6951	-.6139	-.5648
.887	-.5435	-.5718	-.6998	-.6958	-.6340	-.5589
.968	-.5589	-.6834	-.7069	-.6906	-.6224	-.5487

ALPHA (3) = 3.903 BETA (2) = .184 MACH = 1.2973 0 = 600.93 P = 551.82 RN/L = 3.0266

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6740	-.6617	-.6733	-.6956	-.6527	-.5847
.757	-.6574	-.6631	-.6835	-.6942	-.0000	-.5705
.805	-.6536	-.6667	-.6947	-.6959	-.6402	-.5672
.887	-.5541	-.6929	-.7042	-.6926	-.6316	-.5606
.968	-.5624	-.5927	-.7070	-.6835	-.6207	-.5542

ALPHA (4) = 7.853 BETA (1) = -3.870 MACH = 1.2469 0 = 600.88 P = 552.06 RN/L = 3.0236

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6767	-.6639	-.6718	-.6926	-.6542	-.6021
.757	-.6593	-.6619	-.6808	-.6912	-.0000	-.5882
.805	-.6565	-.5562	-.6836	-.6917	-.6533	-.5834
.887	-.6562	-.6795	-.6967	-.6922	-.6464	-.5786
.968	-.6514	-.6953	-.7039	-.6848	-.6336	-.5681

ALPHA (4) = 7.959 BETA (2) = .181 MACH = 1.2469 0 = 600.88 P = 552.06 RN/L = 3.0236

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

.708	-.6756	-.6623	-.6697	-.6974	-.6649	-.5901
.757	-.6504	-.6639	-.6732	-.6983	-.0000	-.5742
.805	-.6555	-.6555	-.6855	-.7009	-.6507	-.5690
.887	-.6551	-.6734	-.7026	-.7026	-.6403	-.5618
.968	-.6542	-.6810	-.7136	-.6997	-.6334	-.5512

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TABULATED PRESSURE DATA - DATA 14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.950 BETA (3) = 4.251 MACH = 1.2469 Q = 600.88 P = 552.06 RNL = 3.0236

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6854 -.6759 -.6875 -.7006 -.6588 -.5993

.757 -.6709 -.6752 -.6937 -.6936 -.0000 -.5875

.805 -.6666 -.6790 -.7032 -.7018 -.6527 -.5839

.887 -.6663 -.6946 -.7134 -.7001 -.6482 -.5791

.968 -.6752 -.7031 -.7110 -.6873 -.6458 -.5772

ALPHA (5) = 11.929 BETA (1) = -3.853 MACH = 1.2466

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6786 -.6648 -.6787 -.6925 -.6605 -.6049

.757 -.6517 -.6659 -.6954 -.6934 -.0000 -.5947

.805 -.6591 -.6707 -.6951 -.6918 -.6500 -.5895

.887 -.6508 -.6837 -.6998 -.6904 -.6466 -.5839

.968 -.6674 -.6880 -.7022 -.6797 -.6320 -.5711

ALPHA (5) = 11.937 BETA (2) = .177 MACH = 1.2465

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6814 -.6698 -.6772 -.7028 -.6751 -.5983

.757 -.6656 -.6700 -.6810 -.7054 -.0000 -.5834

.805 -.6631 -.6704 -.6917 -.7095 -.6607 -.5758

.887 -.6623 -.6816 -.7104 -.7099 -.6505 -.5702

.968 -.6726 -.6933 -.7149 -.7078 -.6441 -.5612

ALPHA (5) = 11.932 BETA (3) = 4.267 MACH = 1.2465

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6964 -.6381 -.6591 -.7121 -.6438 -.5732

.757 -.6783 -.5378 -.7235 -.7092 -.0000 -.5690

.805 -.6760 -.6905 -.7206 -.7085 -.6464 -.5765

.887 -.5783 -.7040 -.7322 -.6976 -.6348 -.5802

.968 -.5964 -.7152 -.7263 -.6760 -.6246 -.5856

(XEBK14)

(XEBK14)

(XEBK14)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

(XEBK15) (13 AUG 75)

REFERENCE DATA

SREF = 2630.000 SC.FT. XMRP = 1076.6900 IN. X0
 UREF = 474.8000 IN. YMRP = .0000 IN. Y0
 ZREF = 935.0690 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .3200

ALPHA (1) = -4.072 BETA (1) = -3.851 MACH = 1.0992

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY	.708	-.7769	-.7597	-.7871	-.8195	-.7669	-.6740
	.757	-.7593	-.7700	-.8013	-.8191	-.0000	-.6496
	.805	-.7572	-.7757	-.8186	-.8224	-.7494	-.6456
	.857	-.7514	-.7399	-.8342	-.8188	-.7339	-.6415
	.968	-.7745	-.8176	-.8413	-.8058	-.7200	-.6308

ALPHA (1) = -4.070 BETA (2) = -.169 MACH = 1.0992

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY	.708	-.7694	-.7644	-.7824	-.8161	-.7625	-.6762
	.757	-.7572	-.7653	-.7983	-.8138	-.0000	-.6517
	.805	-.7529	-.7735	-.8152	-.8159	-.7442	-.6467
	.857	-.7579	-.7919	-.8311	-.8128	-.7345	-.6398
	.958	-.7729	-.8095	-.8365	-.8033	-.7151	-.6244

ALPHA (1) = -4.075 BETA (3) = -.4283 MACH = 1.0992

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY	.708	-.7761	-.7705	-.7883	-.8185	-.7699	-.6871
	.757	-.7638	-.7731	-.8033	-.8178	-.0000	-.6717
	.805	-.7520	-.7803	-.8209	-.8178	-.7516	-.6645
	.857	-.7516	-.8013	-.8370	-.8161	-.7419	-.6528
	.958	-.7748	-.8177	-.8420	-.8055	-.7295	-.6407

PARAMETRIC DATA

RUDDER = .000 SPDBRK = .000
 BDFLAP = .000 L-ELVN = .000
 R-ELVN = .000 MACH = 1.100

RN/L = 3.1890

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE
(XER15)

ALPHA (2) = -.011 BETA (1) = -3.863 MACH = 1.0934 0 = 599.94 P = 709.08 RVL = 3.1892

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.798 -.7547 -.7516 -.7681 -.8013 -.7503 -.6524
.757 -.7407 -.7514 -.7816 -.7998 -.0000 -.6341
.805 -.7361 -.7554 -.7996 -.8046 -.7354 -.6261
.887 -.7380 -.7730 -.8152 -.7998 -.7185 -.6107
.268 -.7537 -.7884 -.8235 -.7865 -.7041 -.5939

ALPHA (2) = -.004 BETA (2) = .183 MACH = 1.0934 0 = 599.94 P = 709.08 RVL = 3.1892

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.798 -.7588 -.7545 -.7716 -.8049 -.7557 -.6599
.757 -.7457 -.7554 -.7856 -.8063 -.0000 -.6378
.805 -.7452 -.7524 -.8042 -.8084 -.7345 -.6352
.687 -.7485 -.7778 -.8220 -.8082 -.7217 -.6220
.565 -.7631 -.7944 -.8286 -.8036 -.7084 -.6063

ALPHA (2) = -.007 BETA (3) = 4.260 MACH = 1.0934 0 = 599.94 P = 709.08 RVL = 3.1892

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.798 -.7330 -.7291 -.7452 -.7787 -.7343 -.6469
.757 -.7229 -.7325 -.7595 -.7768 -.0000 -.6346
.805 -.7203 -.7411 -.7790 -.7799 -.7220 -.6312
.897 -.7215 -.7678 -.7946 -.783 -.7084 -.6251
.558 -.7330 -.7842 -.8003 -.7659 -.6961 -.6156

ALPHA (2) = 3.931 BETA (1) = -3.870 MACH = 1.0960 0 = 598.54 P = 711.69 RVL = 3.1895

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.798 -.7318 -.7222 -.7407 -.7761 -.7276 -.6239
.757 -.7179 -.7256 -.7528 -.7778 -.0000 -.6111
.805 -.7110 -.7327 -.7733 -.7790 -.7091 -.6075
.267 -.7135 -.7632 -.7920 -.7769 -.6934 -.6012
.563 -.7237 -.7728 -.7951 -.7637 -.6812 -.5867

L-140A/B/C/R
SECTION 1
RIGHT HAND
INSIDE

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TABULATED PRESSURE DATA - CAA14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB SPEED BRAKE SECTION 1: RIGHT HAND INSIDE										(NEXBR15)	
DEPENDENT VARIABLE CP										RN/L = 3.1895	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CV			P = 711.89	RN/L = 3.1895
ALPHA (3) = 3.932	BETA (2) = .189	MACH = 1.0953	O = 598.54	P = 711.89	RN/L = 3.1895						
SECTION 1: RIGHT HAND INSIDE							X/CV				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	ALPHA (4) = 7.884	BETA (1) = -3.865	MACH = 1.0986	O = 599.29	P = 709.30
SECTION 1: RIGHT HAND INSIDE							X/CV				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	ALPHA (4) = 7.955	BETA (2) = .179	MACH = 1.0986	O = 599.29	P = 709.30
SECTION 1: RIGHT HAND INSIDE							X/CV				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920					

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.955 BETA (3) = 4.242 MACH = 1.0986 Q = 599.29 P = 709.30 RNL = 3.1886
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.705	.7293	.7255	.7376	.7706	.7134	.5832
.757	.7121	.7245	.7544	.7718	.0000	.5756
.805	.7107	.7345	.7795	.7796	.6813	.5657
.857	.7057	.7510	.7855	.7727	.6654	.5564
.903	.7228	.7803	.7917	.7608	.6481	.5409

ALPHA (5) = 11.925 BETA (1) = -3.850 MACH = 1.0981 Q = 598.93 P = 709.53 RNL = 3.1856

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.705	.7401	.7339	.7565	.7873	.7197	.6061
.757	.7268	.7360	.7761	.7901	.0000	.5915
.805	.7222	.7487	.7985	.7911	.6929	.5782
.857	.7220	.7657	.8165	.7771	.6784	.5605
.903	.7435	.7814	.8173	.8173	.6558	.5448

ALPHA (5) = 11.933 BETA (2) = -1.77 MACH = 1.0981 Q = 598.93 P = 709.53 RNL = 3.1856

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.705	.7131	.7135	.7310	.7628	.7160	.6240
.757	.7057	.7143	.7457	.7630	.0000	.6060
.805	.6983	.7222	.7623	.7697	.6991	.5998
.857	.7133	.7491	.7780	.7628	.6834	.6019
.903	.7224	.7632	.7837	.7547	.6677	.5891

ALPHA (5) = 11.928 BETA (3) = 4.259 MACH = 1.0981 Q = 598.93 P = 709.53 RNL = 3.1856

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.705	.7523	.7527	.7695	.8069	.7401	.6157
.757	.7365	.7557	.7569	.8045	.0000	.6036
.805	.7375	.7357	.8095	.8038	.7196	.5943
.857	.7365	.7565	.8225	.7936	.6970	.5922
.903	.7365	.7653	.8236	.7786	.6792	.5630

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TABULATED PRESSURE DATA - 0A14B 1 AMES 11-073-1

AMES 11-073(0A14B) - 140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

SZEF = 2590.0000 SC.F.T. XMRP = 1076.6800 IN. XO
 LREF = .7+.8000 IN. YMRP = .0000 IN. YO
 BREF = 935.3680 IN. ZMRP = .375.0000 IN. ZO
 SCALE = .C300

ALPHA (1) = -.4-.023 BETA (1) = -3.652 MACH = .90217 Q = 601.77 P = 1056.2 RN/L = 3.5811

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5879 -.5922 -.6529 -.6943 -.5860 -.3953
 .757 -.5680 -.6023 -.6830 -.7123 -.0000 -.3792
 .805 -.5635 -.6247 -.7268 -.7045 -.5410 -.3730
 .837 -.5770 -.6688 -.7556 -.6941 -.5167 -.3930
 .953 -.6231 -.7405 -.7674 -.6754 -.5072 -.3214

ALPHA (1) = -.3-.925 BETA (2) = .188 MACH = .90217 Q = 601.77 P = 1056.2 RN/L = 3.5811

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5131 -.5219 -.5798 -.6255 -.5340 -.3947
 .757 -.5052 -.5262 -.6103 -.6316 -.0000 -.3677
 .805 -.5121 -.5440 -.6516 -.6271 -.5046 -.3629
 .887 -.5176 -.5975 -.6850 -.6181 -.4800 -.3420
 .953 -.5583 -.6562 -.6956 -.6042 -.4658 -.3235

ALPHA (1) = -.3-.933 BETA (3) = 4.285 MACH = .90217 Q = 601.77 P = 1056.2 RN/L = 3.5811

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5791 -.5908 -.6370 -.6815 -.5991 -.4264
 .757 -.5533 -.5884 -.6706 -.6973 -.0000 -.4082
 .805 -.5515 -.6179 -.7003 -.6789 -.5594 -.3966
 .887 -.5720 -.6522 -.7326 -.6795 -.5450 -.3735
 .953 -.6150 -.7032 -.7473 -.6699 -.5184 -.3574

PARAMETRIC DATA

RUDDER = .000 SPODBK = 35.000
 BOFLAP = .000 L-ELVN = .000
 R-ELVN = .000 MACH = .900

(XEBK16) (13 AUG 75)

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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ALPHA (2) = .017		BETA (1) = -3.871	MACH = .89983	Q = 599.69	P = 1058.1	RNL = 3.5748	(XEBK16)
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP
X/CP							
.708	-.6020	-.6082	-.6735	-.7018	-.5438	-.3169	
.757	-.5791	-.6161	-.7205	-.7124	.0000	-.2992	
.805	-.5672	-.6469	-.7561	-.6953	-.4785	-.2961	
.887	-.5887	-.7076	-.7827	-.6828	-.4604	-.2592	
.958	-.6311	-.7659	-.7766	-.6535	-.4324	-.2431	
ALPHA (2) = .043	BETA (2) = .183	MACH = .89983	Q = 599.69	P = 1058.1	RNL = 3.5748		
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP
X/CP							
.708	-.5365	-.5410	-.6040	-.6375	-.5439	-.3769	
.757	-.5226	-.5574	-.6418	-.6435	.0001	-.3602	
.805	-.5291	-.5784	-.6651	-.6378	-.5061	-.3433	
.887	-.5631	-.6360	-.7077	-.6283	-.4814	-.3295	
.958	-.5801	-.6931	-.7050	-.6226	-.4470	-.3145	
ALPHA (2) = .037	BETA (3) = .4263	MACH = .89983	Q = 599.69	P = 1058.1	RNL = 3.5748		
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP
X/CP							
.708	-.5821	-.5864	-.6462	-.6640	-.5424	-.3420	
.757	-.5595	-.6033	-.6873	-.6621	.0000	-.3325	
.805	-.5638	-.6353	-.7148	-.6631	-.5056	-.3242	
.887	-.5857	-.6753	-.7336	-.6524	-.4871	-.3119	
.958	-.6310	-.7131	-.7285	-.6260	-.4475	-.2841	
ALPHA (2) = 3.891	BETA (1) = -3.877	MACH = .90107	Q = 600.53	P = 1056.6	RNL = 3.5722		
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CP
X/CP							
.708	-.5478	-.5547	-.6275	-.6251	-.4300	-.2345	
.757	-.5238	-.5626	-.6683	-.6315	.0000	-.2207	
.805	-.5254	-.5898	-.7079	-.6299	-.3928	-.2160	
.887	-.5404	-.6641	-.7371	-.5879	-.3603	-.2165	
.958	-.5769	-.7095	-.7217	-.5677	-.3413	-.2177	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

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ALPHA (3) = 4.016 BETA (2) = .188 MACH = .90107 0 = 600.53 P = 1056.6 RN/L = 3.5722
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.5267	-.5343	-.6111	-.6327	-.5042	-.3327
.757	-.5153	-.5548	-.6370	-.6244	-.0000	-.3130
.805	-.5167	-.5765	-.6709	-.6275	-.4688	-.3054
.887	-.5336	-.6297	-.7006	-.6099	-.4496	-.2998
.968	-.5808	-.6822	-.7055	-.5933	-.4150	-.2737

ALPHA (3) = 4.017 BETA (3) = 4.257 MACH = .90107 0 = 600.53 P = 1056.6 RN/L = 3.5722

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.5269	-.5495	-.6032	-.5889	-.4386	-.2947
.757	-.5105	-.5653	-.6319	-.5951	-.0000	-.2805
.805	-.5174	-.6099	-.6637	-.5813	-.4073	-.2784
.887	-.5522	-.6389	-.6680	-.5725	-.3869	-.2620
.968	-.5985	-.6710	-.6730	-.5393	-.3783	-.2496

ALPHA (4) = 7.978 BETA (1) = -3.868 MACH = .90107 0 = 600.53 P = 1056.6 RN/L = 3.5741

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.5343	-.5381	-.6248	-.6104	-.4077	-.2398
.757	-.5188	-.5524	-.6543	-.5871	-.0000	-.2174
.805	-.5185	-.5334	-.6799	-.5978	-.3681	-.2284
.887	-.5365	-.6465	-.6846	-.5596	-.3460	-.2129
.968	-.5729	-.6919	-.6901	-.5121	-.3316	-.2131

ALPHA (4) = 7.924 BETA (2) = .181 MACH = .90107 0 = 600.53 P = 1056.6 RN/L = 3.5741

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BN .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.709	-.5240	-.5323	-.6039	-.6198	-.4585	-.2838
.757	-.5069	-.5342	-.6248	-.6259	-.0000	-.2657
.805	-.5259	-.5692	-.6741	-.6150	-.4396	-.2479
.887	-.5357	-.6447	-.7013	-.5996	-.4132	-.2654
.968	-.5647	-.6937	-.7070	-.5747	-.3841	-.2302

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

(XEBK16)

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

ALPHA (4) = 7.921 BETA (3) = 4.257 MACH = .90107 C = 600.53 P = 1056.6 RNL = 3.5741

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5188 -.5366 -.6125 -.5638 -.3914 -.2503
.757 -.5038 -.5522 -.6348 -.5541 .0000 -.2347
.805 -.5159 -.6027 -.6577 -.5398 -.3791 -.2482
.887 -.5397 -.6539 -.6710 -.5311 -.3436 -.2354
.968 -.5975 -.6703 -.6367 -.4889 -.3256 -.2323

ALPHA (5) = 11.916 BETA (1) = -3.856 MACH = .90000 Q = 599.65 P = 1057.6 RNL = 3.5745

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .758 -.5661 -.5489 -.5764 -.6491 -.4003 -.2500
.757 -.5392 -.5494 -.5950 -.5783 .0000 -.2479
.805 -.5415 -.5665 -.5175 -.5584 -.3842 -.2439
.887 -.5353 -.6005 -.6588 -.5582 -.3943 -.2375
.968 -.5492 -.6333 -.5721 -.5228 -.3362 -.2392

ALPHA (5) = 11.928 BETA (2) = .182 MACH = .90000 O = 599.65 P = 1057.6 RNL = 3.5745

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5497 -.5361 -.5737 -.6576 -.4275 -.2597
.757 -.5325 -.5385 -.5934 -.5718 .0000 -.2455
.805 -.5292 -.5500 -.6191 -.5713 -.3966 -.2386
.887 -.5323 -.5325 -.6520 -.5528 -.3831 -.2342
.968 -.5531 -.6325 -.6597 -.5195 -.3472 -.2129

ALPHA (5) = 11.917 BETA (3) = 4.273 MACH = .90000 Q = 599.65 P = 1057.6 RNL = 3.5745

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .759 -.5583 -.5547 -.5016 -.6382 -.3966 -.2459
.757 -.5377 -.5702 -.6268 -.5615 .0000 -.2414
.805 -.5494 -.5757 -.6539 -.5610 -.3709 -.2367
.887 -.5333 -.5232 -.6553 -.5265 -.3552 -.2496
.968 -.5607 -.5478 -.6432 -.4997 -.3384 -.2339

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

	X/REF	Y/REF	Z/REF	SCALe	XMRP	YMRP	ZMRP	BETA (1)	BETA (2)	BETA (3)	MACH	Q	P	R	RUDDER	BDFLAP	R-ELVN	SPDRK	L-ELVN	MACH	PARAMETRIC DATA
SECTION (1)	RIGHT HAND INSIDE																				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920															
X/CV																					
.708	-.6426	-.6801	-.8172	-.6872	-.1998	-.0836															
.757	-.6289	-.6970	-.8387	-.5867	0.0000	-.0970															
.805	-.6315	-.7791	-.8535	-.5501	-.2179	-.0927															
.887	-.6616	-.8783	-.8607	-.5049	-.2533	-.1287															
.968	-.7333	-.9253	-.8318	-.4527	-.2659	-.2004															
ALPHA (1)	= -4.086	BETA (2)	= -3.838	MACH	= .59694	Q	P	R													
SECTION (1)	RIGHT HAND INSIDE																				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920															
X/CV																					
.708	-.5934	-.6107	-.7274	-.6971	-.2698	-.0935															
.757	-.5898	-.6493	-.7819	-.5589	0.0000	-.0904															
.805	-.5846	-.7057	-.8280	-.5597	-.2364	-.0873															
.887	-.6053	-.8168	-.8235	-.5008	-.2457	-.1221															
.958	-.6858	-.8875	-.7364	-.4598	-.2412	-.1630															
ALPHA (1)	= -4.079	BETA (3)	= .201	MACH	= .59694	Q	P	R													
SECTION (1)	RIGHT HAND INSIDE																				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920															
X/CV																					
.708	-.5557	-.5923	-.6738	-.6693	-.3145	-.1667															
.757	-.5628	-.5939	-.7321	-.5519	0.0000	-.1538															
.805	-.5512	-.6309	-.7435	-.5307	-.3039	-.1381															
.887	-.5858	-.7365	-.7395	-.4886	-.2798	-.1280															
.958	-.6298	-.8109	-.7576	-.4469	-.2421	-.1571															

(XEBK17)

(13 AUG 75)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (1) = -4.086 BETA (4) = 4.270 MACH = .59694 Q = 595.28 P = 2386.4 RN/L = 4.8216

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.5569 -.5714 -.6199 -.6439 -.3574 -.1820

.757 -.5486 -.5750 -.6527 -.5391 .0000 -.1952

.805 -.5588 -.5984 -.6874 -.5334 -.3398 -.1943

.887 -.5735 -.6815 -.7060 -.5205 -.3298 -.1965

.968 -.5982 -.7617 -.6865 -.4773 -.3085 -.1998

ALPHA (1) = -4.101 BETA (5) = 8.352 MACH = .59694 Q = 595.28 P = 2386.4 RN/L = 4.8216

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6507 -.6512 -.7302 -.6068 -.3266 -.1614

.757 -.6244 -.6579 -.7630 -.5486 .0000 -.1748

.805 -.6153 -.7104 -.8014 -.5346 -.3085 -.1622

.887 -.5550 -.8152 -.8033 -.5119 -.2956 -.1864

.968 -.6928 -.8694 -.7516 -.4509 -.2884 -.2191

ALPHA (2) = .084 BETA (1) = -7.892 MACH = .59642 Q = 594.20 P = 2386.3 RN/L = 4.8159

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6867 -.6749 -.8116 -.7012 -.2317 -.0687

.757 -.6611 -.6920 -.8465 -.5841 .0000 -.0780

.805 -.6535 -.8447 -.8659 -.5700 -.2131 -.0970

.887 -.6570 -.8622 -.8772 -.4959 -.2301 -.1373

.968 -.7039 -.9228 -.6413 -.4508 -.2515 -.2081

ALPHA (2) = -.094 BETA (2) = -3.858 MACH = .59642 Q = 594.20 P = 2386.3 RN/L = 4.8159

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6461 -.6397 -.7348 -.6913 -.2814 -.1070

.757 -.6258 -.6418 -.7577 -.5976 .0000 -.1080

.805 -.6261 -.6573 -.7345 -.5781 -.2589 -.1120

.887 -.6311 -.7454 -.8369 -.5117 -.2415 -.1132

.968 -.6559 -.8369 -.8194 -.4598 -.2293 -.1481

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

ALPHA (2) = .071 BETA (3) = .198 MACH = .59642 Q = 594.20 P = 2386.3 RNL = 4.8159

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6219	-.6193	-.7105	-.6707	-.3251	-.1173
.757	-.6060	-.6245	-.7279	-.5744	.0000	-.1204
.805	-.6005	-.6490	-.7691	-.5539	-.2901	-.1173
.857	-.6117	-.7228	-.8032	-.5392	-.2608	-.1150
.968	-.6274	-.8111	-.7944	-.4679	-.2286	-.1296

ALPHA (2) = .068 BETA (4) = 4.249 MACH = .59642 Q = 594.20 P = 2386.3 RNL = 4.8159

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.799	-.6415	-.6351	-.7019	-.6384	-.3282	-.1321
.757	-.6108	-.6372	-.7534	-.5661	.0000	-.1467
.825	-.6139	-.6651	-.7828	-.5535	-.2974	-.1350
.887	-.6251	-.7551	-.8239	-.5236	-.2676	-.1380
.968	-.6453	-.8446	-.8057	-.4604	-.2373	-.1770

ALPHA (2) = .051 BETA (5) = 8.308 MACH = .59642 Q = 594.20 P = 2386.3 RNL = 4.8159

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/3V .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6640	-.6517	-.7527	-.5958	-.3227	-.1582
.757	-.6346	-.6664	-.7834	-.5646	.0000	-.1496
.805	-.6298	-.7156	-.9257	-.5653	-.3129	-.1534
.857	-.6581	-.8293	-.8317	-.5153	-.2991	-.1695
.958	-.6680	-.8331	-.7725	-.4552	-.2602	-.1991

ALPHA (3) = 4.005 BETA (1) = -7.903 MACH = .59616 Q = 593.73 P = 2386.3 RNL = 4.8137

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

.798	-.6764	-.6758	-.7979	-.6867	-.1967	-.0589
.757	-.6432	-.5917	-.9127	-.5903	.0000	-.0826
.805	-.6497	-.7103	-.8444	-.5655	-.2087	-.0974
.857	-.6555	-.7665	-.8720	-.4334	-.2187	-.1399
.958	-.6751	-.8683	-.7933	-.4575	-.2433	-.2035

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140N/B/C/R ORB SPEED BRAKE
SECTION (1) RIGHT HAND INSIDE
Z/BY .3170 .4120 .5070 .6020 .6970 .7920
DEPENDENT VARIABLE CP
 X/CP
.708 -.6207 -.6071 -.7142 -.6564 -.2464 -.0909
.757 -.5999 -.6168 -.7398 -.5539 .0000 -.0952
.805 -.6025 -.6456 -.7766 -.5334 -.2342 -.1143
.897 -.6028 -.7282 -.8115 -.4930 -.2156 -.1204
.968 -.6257 -.7956 -.7804 -.4244 -.2132 -.1528
ALPHA (3) = 4.010 BETA (2) = -3.866 MACH = .59616 Q = 593.73 P = 2386.3 RNL = 4.8137
SECTION (1) RIGHT HAND INSIDE
Z/BY .3170 .4120 .5070 .6020 .6970 .7920
DEPENDENT VARIABLE CP
 X/CP
.708 -.6214 -.6152 -.7126 -.6515 -.2912 -.1114
.757 -.5974 -.6195 -.7453 -.5640 .0000 -.0988
.805 -.5914 -.6520 -.7770 -.5428 -.2483 -.1033
.887 -.6007 -.7627 -.8020 -.5175 -.2347 -.0992
.968 -.6352 -.8293 -.7848 -.4486 -.2230 -.1286
ALPHA (3) = 4.011 BETA (4) = 4.242 MACH = .59616 Q = 593.73 P = 2386.3 RNL = 4.8137
SECTION (1) RIGHT HAND INSIDE
Z/BY .3170 .4120 .5070 .6020 .6970 .7920
DEPENDENT VARIABLE CP
 X/CP
.708 -.6275 -.6154 -.6990 -.6486 -.3098 -.1205
.757 -.6006 -.6246 -.7429 -.5653 .0000 -.1165
.805 -.5013 -.6555 -.7732 -.5587 -.2561 -.1169
.887 -.6023 -.7215 -.8047 -.5217 -.2542 -.1294
.968 -.5277 -.7649 -.7943 -.4498 -.2095 -.1445
ALPHA (3) = 4.014 BETA (5) = 8.290 MACH = .59616 Q = 593.73 P = 2386.3 RNL = 4.8137
SECTION (1) RIGHT HAND INSIDE
Z/BY .3170 .4120 .5070 .6020 .6970 .7920
DEPENDENT VARIABLE CP
 X/CP
.708 -.6559 -.6558 -.7293 -.6047 -.3314 -.1580
.757 -.6332 -.6557 -.7854 -.5848 .0000 -.1544
.805 -.5720 -.6839 -.7957 -.5836 -.3118 -.1518
.887 -.6577 -.7524 -.8165 -.5349 -.3018 -.1676
.968 -.6599 -.7825 -.7771 -.4704 -.2681 -.1927

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.901 BETA (1) = -7.891 MACH = .59650 Q = 594.32 P = 2386.1 RNL = 4.8187

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5689 -.5896 -.6339 -.4946 -.2379 -.2038

.757 -.5463 -.5915 -.6532 -.4183 .0009 -.2052

.805 -.5504 -.6367 -.6451 -.3925 -.2377 -.2129

.897 -.5795 -.5927 -.6294 -.3732 -.2479 -.2194

.958 -.6233 -.7294 -.5915 -.3608 -.2637 -.2315

ALPHA (4) = 7.313 BETA (2) = -3.864 MACH = .59650 Q = 594.32 P = 2386.1 RNL = 4.8187

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5843 -.5855 -.7007 -.5913 -.1999 -.1026

.757 -.5552 -.6014 -.7191 .5161 -.1135

.815 -.5605 -.6276 -.7625 -.4756 -.1899 -.1205

.887 -.5717 -.7521 -.7747 -.4367 -.1879 -.1345

.958 -.5969 -.8134 -.7344 -.4026 -.2015 -.1594

ALPHA (4) = 7.919 BETA (3) = .190 MACH = .59650 Q = 594.32 P = 2386.1 RNL = 4.8187

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6196 -.6099 -.7122 -.6262 -.2734 -.0954

.757 -.5920 -.6176 -.7562 -.5555 .0000 -.0975

.805 -.5927 -.6449 -.8007 -.5386 -.2217 -.0875

.887 -.6039 -.7500 -.8077 -.4882 -.2206 -.1053

.958 -.6302 -.8325 -.7824 -.4258 -.1951 -.1259

ALPHA (4) = 7.918 BETA (4) = 4.240 MACH = .59650 Q = 594.32 P = 2386.1 RNL = 4.8187

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5971 -.5995 -.6902 -.5611 -.2313 -.1150

.757 -.5724 -.6044 -.7389 .4955 .0000 -.1219

.805 -.5124 -.6459 -.7627 .4917 -.2042 -.1236

.887 -.5347 -.7575 -.7707 -.4752 -.2132 -.1371

.958 -.6338 -.7970 -.7232 -.3807 -.2004 -.1636

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-07310A148) - 140A/B/C/R ORB SPEED BRAKE							1XEBK17)
SECTION (1)RIGHT HAND INSIDE							DEPENDENT VARIABLE CP
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV							
.738	-.5820	-.6000	-.6528	-.4636	-.2743	-.1749	
.757	-.5661	-.6066	-.6923	-.4728	.0000	-.1847	
.805	-.5713	-.6573	-.6923	-.4702	-.1890		
.997	-.6057	-.7228	-.6811	-.4438	-.2662	-.2167	
.359	-.6478	-.7247	-.6117	-.3877	-.2634	-.2297	
ALPHA (5) = 11.926	BETA (1) =	-7.855	MACH =	.59628	0	= 593.97	P = 2386.5
SECTION (1)RIGHT HAND INSIDE							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	DEPENDENT VARIABLE CP
X/CV							
.709	-.5472	-.5363	-.5875	-.4965	-.2743	-.2141	
.757	-.5292	-.5577	-.6035	-.4418	.0000	-.2291	
.835	-.5216	-.5970	-.6154	-.4225	-.2631	-.2160	
.887	-.5520	-.6544	-.6159	-.4144	-.2693	-.2234	
.963	-.5719	-.6675	-.5655	-.4025	-.2724	-.2421	
ALPHA (5) = 11.949	BETA (2) =	-3.840	MACH =	.59628	0	= 593.97	P = 2386.5
SECTION (1)RIGHT HAND INSIDE							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	DEPENDENT VARIABLE CP
X/CV							
.708	-.5814	-.5833	-.6739	-.5712	-.2178	-.1156	
.757	-.5653	-.5912	-.7067	-.4905	.0000	-.1216	
.805	-.5624	-.6125	-.7277	-.4867	-.2009	-.1330	
.887	-.5662	-.7202	-.7508	-.4293	-.2080	-.1446	
.968	-.6011	-.7572	-.7103	-.3874	-.2213	-.1704	
ALPHA (5) = 11.954	BETA (3) =	.189	MACH =	.59628	0	= 593.97	P = 2386.5
SECTION (1)RIGHT HAND INSIDE							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	DEPENDENT VARIABLE CP
X/CV							
.709	-.5174	-.5112	-.7091	-.6260	-.2694	-.0883	
.757	-.5979	-.6172	-.7496	-.5559	.0000	-.0819	
.835	-.5932	-.6595	-.7746	-.5337	-.2396	-.0871	
.887	-.6052	-.7545	-.8099	-.4548	-.2026	-.1029	
.968	-.6326	-.8311	-.7847	-.4339	-.1993	-.1183	
ALPHA (5) = 11.954	BETA (3) =	.189	MACH =	.59628	0	= 593.97	P = 2386.5
SECTION (1)RIGHT HAND INSIDE							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE (XEROX17)						
ALPHA (5) =	11.352	BETA (4) =	4.250	MACH =	.59628	P = 593.97
SECTION 1) RIGHT HAND INSIDE Z/3V DEPENDENT VARIABLE CP						
X/CV	.725	-.5950	-.5949	-.7129	-.5556	-.2452
	.757	-.5813	-.5049	-.7337	-.4933	-.1347
	.805	-.5725	-.5620	-.7518	-.4735	-.0900
	.837	-.6025	-.7534	-.7800	-.4425	-.1476
	.953	-.6542	-.7956	-.7284	-.3604	-.2218
						-.1502
						-.2084
						-.1834
ALPHA (5) =	11.342	BETA (5) =	8.320	MACH =	.59628	P = 593.97
SECTION 1) RIGHT HAND INSIDE Z/3V DEPENDENT VARIABLE CP						
X/CV	.7170	-.4120	.5070	.6020	.6970	.7920
	.738	-.5679	-.5708	-.6095	-.4506	-.2783
	.757	-.5478	-.6023	-.6109	-.4244	-.2079
	.835	-.5655	-.6274	-.6688	-.4099	-.0030
	.887	-.6082	-.6770	-.6219	-.4397	-.2132
	.963	-.6526	-.6629	-.5291	-.3530	-.2764
						-.2170
						-.2236
						-.2698
						-.2343

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

(XEBK1B) (13 AUG 75)

REFERENCE DATA

SREF = 2630.0000 SC.FT. XREF = 1076.6800 IN. X0
 LREF = 471.5000 IN. YREF = .0000 IN. Y0
 BREF = 935.0680 IN. ZREF = 375.0000 IN. Z0
 SCALE = .2300

ALPHA (1) = -4.050 BETA (1) = -3.854 MACH = 1.3965 0 = 599.95 P = 439.47 RBL = 2.9144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3173 .4123 .5070 .6020 .6970 .7920

X/CP .728 -.2315 -.2259 -.1969 -.2753 -.2655 -.2653
 .751 -.2267 -.2254 -.2255 -.2651 -.2655 -.2525
 .825 -.2375 -.2244 -.2135 -.2301 -.2712 -.2686 -.2461
 .831 -.2425 -.2312 -.2301 -.2325 -.3266 -.2969 -.2989

ALPHA (2) = -4.042 BETA (2) = .192 MACH = 1.3965 0 = 599.95 P = 439.47 RBL = 2.9144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3173 .4123 .5070 .6020 .6970 .7920

X/CP .728 -.2324 -.2291 -.2238 -.2578 -.2448 -.2367
 .751 -.2410 -.2326 -.2339 -.2548 .0000 -.2306
 .825 -.2407 -.2345 -.2334 -.2545 -.2441 -.2266
 .837 -.2540 -.2471 -.2495 -.2609 -.2467 -.2262
 .559. -.2931 -.3241 -.3370 -.3221 -.2856 -.2899

ALPHA (3) = -4.051 BETA (3) = 4.285 MACH = 1.3965 0 = 599.95 P = 439.47 RBL = 2.9144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3172 .4123 .5073 .6020 .6970 .7920

X/CP .728 -.2372 -.2120 -.2502 -.2369 -.2288 -.2265
 .751 -.2512 -.2449 -.2499 -.2383 .0000 -.2238
 .825 -.2504 -.2475 -.2511 -.2383 -.2312 -.2210
 .887 -.2561 -.2593 -.2554 -.2471 -.2338 -.2219
 .263 -.2549 -.3250 -.3318 -.3095 -.2725 -.2812

PARAMETRIC DATA

RUDDER = .000 SPOILER = .000
 BOFLAP = -11.700 L-ELVN = .000
 R-ELVN = .000 MACH = 1.400

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -160A/B/C/R ORB SPEED BRAKE (XEBK18)						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
A ₁ PH4 (2) = -.030 BETA (1) = -3.874 MACH = 1.3950 0 = 599.63 P = 440.18 RN/L = 2.9101						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
A ₁ PH4 (2) = -.025 BETA (2) = .186 MACH = 1.3950 0 = 599.63 P = 440.18 RN/L = 2.9101						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
A ₁ PH4 (2) = -.030 BETA (3) = 4.265 MACH = 1.3950 0 = 599.63 P = 440.18 RN/L = 2.9101						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
A ₁ PH4 (3) = 3.919 BETA (1) = -3.877 MACH = 1.3940 0 = 599.41 P = 440.65 RN/L = 2.9155						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						

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TABULATED PRESSURE DATA - OAI14B (AMES 11-073-1)

AMES 11-073(OAI14B) -140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.919 BETA (3) = 4.252 MACH = 1.3956 0 = 599.84 P = 439.94 RNL = 2.9129

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2630 -.3092 -.3330 -.3085 -.3004 -.3023

.757 -.2894 -.3130 -.3308 -.3128 -.0000 -.3021

.805 -.3004 -.3175 -.3292 -.3133 -.3047 -.3014

.897 -.3163 -.3306 -.3301 -.3194 -.3083 -.3054

.968 -.3456 -.3645 -.3835 -.3714 -.3427 -.3565

ALPHA (5) = 11.807 BETA (1) = -3.848 MACH = 1.3955 0 = 599.65 P = 439.24 RNL = 2.9163

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2685 -.2882 -.2930 -.3841 -.3758 -.3692

.737 -.2889 -.2894 -.2991 -.3720 -.0000 -.3582

.825 -.2911 -.2942 -.3077 -.3696 -.3730 -.3521

.887 -.3054 -.3039 -.3243 -.3741 -.3732 -.3502

.968 -.3344 -.3543 -.3879 -.4105 -.3912 -.3895

ALPHA (5) = 11.815 BETA (2) = 1.87 MACH = 1.3955 0 = 599.65 P = 439.24 RNL = 2.9163

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2771 -.3205 -.3307 -.3587 -.3511 -.3449

.757 -.3017 -.3219 -.3343 -.3561 -.0000 -.3400

.805 -.3103 -.3255 -.3371 -.3556 -.3499 -.3362

.887 -.3243 -.3276 -.3464 -.3616 -.3514 -.3369

.968 -.3446 -.3569 -.4164 -.4085 -.3782 -.3850

ALPHA (5) = 11.810 BETA (3) = 4.268 MACH = 1.3955 0 = 599.65 P = 439.24 RNL = 2.9163

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2800 -.3273 -.3526 -.3291 -.3217 -.3229

.757 -.3267 -.3238 -.3524 -.3305 -.0000 -.3236

.805 -.3177 -.3372 -.3498 -.3324 -.3251 -.3224

.887 -.3330 -.3495 -.3498 -.3519 -.3286 -.3277

.968 -.3611 -.3332 -.3980 -.3980 -.3605 -.3770

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(DA14B) - 140A/B/C/R ORB SPEED BRAKE
ALPHA (6) = 15.906 BETA (1) = -3.833 MACH = 1.3951 Q = 599.73 P = 440.18 RNL = 2.9164

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2917 -.3124 -.3175 -.3997 -.3918 -.3928

.757 -.3103 -.3145 -.3216 -.3902 .0000 -.3717

.805 -.3153 -.3169 -.3292 -.3861 -.3888 -.3557

.897 -.3267 -.3293 -.3453 -.3911 -.3873 -.3667

.958 -.3562 -.3805 -.4123 -.4303 -.4061 -.4036

ALPHA (6) = 15.920 BETA (2) = .164 MACH = 1.3951 Q = 599.73 P = 440.18 RNL = 2.9164

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2957 -.3391 -.3502 -.3761 -.3700 -.3640

.757 -.3215 -.3415 -.3521 -.3745 .0000 -.3595

.805 -.3315 -.3563 -.3564 -.3745 -.3700 -.3566

.887 -.3480 -.3618 -.3654 -.3797 -.3709 -.3620

.958 -.3599 -.4158 -.4362 -.4255 -.3958 -.4056

ALPHA (6) = 15.910 BETA (3) = 4.299 MACH = 1.3951 Q = 599.73 P = 440.18 RNL = 2.9164

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3034 -.3456 -.3678 -.3483 -.3381 -.3400

.757 -.3289 -.3494 -.3654 -.3493 .0000 -.3393

.805 -.3384 -.3549 -.3657 -.3507 -.3417 -.3393

.887 -.3549 -.3659 -.3573 -.3550 -.3462 -.3416

.958 -.3795 -.4049 -.4245 -.4077 -.3768 -.3909

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AMES 11-073(DA14B)

AMES 11-073(DA14B) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (6) = 15.906 BETA (1) = -3.833 MACH = 1.3951 Q = 599.73 P = 440.18 RNL = 2.9164

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.6800 IN. X0	RUDDER =	.000
LREF =	474.6000 IN.	YMRP =	.0000 IN. Y0	BOFLAP =	-11.700
BREF =	936.0680 IN.	ZMRP =	375.0000 IN. Z0	R-ELVN =	.000
SCALE =	.0300			MACH =	1.250

ALPHA (1) = -4.048 BETA (1) = -3.898 MACH = 1.2478

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2777	-2913	-2935	-3906	-3861	-3842
.757	-2948	-2927	-2994	-3794	.0000	-3775
.805	-2958	-2943	-3036	-3775	-3865	-3730
.887	-3055	-3077	-3289	-3870	-3901	-3757
.968	-3370	-3659	-4131	-4447	-4197	-4311

ALPHA (1) = -3.974 BETA (2) = .192 MACH = 1.2478

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2745	-3093	-3191	-3822	-3713	-3656
.757	-2993	-3119	-3224	-3761	.0000	-3583
.805	-3062	-3162	-3302	-3749	-3716	-3526
.887	-3186	-3289	-3481	-3844	-3746	-3539
.968	-3455	-4043	-4710	-4537	-4129	-4202

ALPHA (1) = -3.984 BETA (3) = 4.283 MACH = 1.2478

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

SECTION (1)RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-2864	-3313	-3538	-3606	-3604	-3578
.757	-3135	-3335	-3440	-3604	.0000	-2545
.805	-3213	-3373	-3476	-3618	-3618	-3507
.887	-3739	-3454	-3552	-3696	-3651	-3502
.968	-3606	-3382	-4215	-4282	-3995	-4096

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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ALPHA (2) = - .051 BETA (1) = - 3.861 MACH = 1.2471 0 = 599.71 P = 550.87 RNL = 3.0179

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.2813	-.3192	-.3284	-.4238	-.4155	-.4136
	.757	-.3070	-.3215	-.3334	-.4120	.0000	-.4044
	.805	-.3134	-.3237	-.3407	-.4099	-.4155	-.3991
	.887	-.3268	-.3343	-.3597	-.4162	-.4172	-.4005
	.959	-.3513	-.3693	-.4196	-.4609	-.4447	-.4516

ALPHA (2) = - .007 BETA (2) = .182 MACH = 1.2471 0 = 599.71 P = 550.87 RNL = 3.0179

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

X/CV	.708	-.2787	-.3328	-.3490	-.4103	-.4019	-.3955
	.757	-.3073	-.3359	-.3523	-.4061	.0000	-.3886
	.805	-.3190	-.3400	-.3592	-.4031	-.4017	-.3832
	.887	-.3333	-.3505	-.3751	-.4126	-.4043	-.3843
	.968	-.3512	-.3938	-.4675	-.4806	-.4404	-.4438

ALPHA (2) = - .013 BETA (3) = 4.263 MACH = 1.2471 0 = 599.71 P = 550.87 RNL = 3.0179

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

X/CV	.708	-.2963	-.3520	-.3666	-.3865	-.3848	-.3839
	.757	-.3167	-.3539	-.3678	-.3846	.0000	-.3813
	.805	-.3315	-.3779	-.3716	-.3853	-.3855	-.3782
	.887	-.3446	-.3703	-.3768	-.3922	-.3893	-.3874
	.968	-.3565	-.3931	-.4235	-.4432	-.4232	-.4388

ALPHA (3) = 3.859 BETA (1) = - 3.873 MACH = 1.2484 0 = 600.53 P = 550.41 RNL = 3.0214

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

X/CV	.708	-.2907	-.3448	-.3552	-.4560	-.4451	-.4422
	.757	-.3181	-.3467	-.3599	-.4408	.0000	-.4320
	.805	-.3324	-.3783	-.3673	-.4377	-.4455	-.4261
	.887	-.3483	-.3593	-.3846	-.4415	-.4448	-.4260
	.968	-.3755	-.3942	-.4209	-.4652	-.4645	-.4719

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -1404/B/C/R ORB SPEED BRAKE							(XEQK19)
ALPHA (3) = 3.906	BETA (2) = .178	MACH = 1.2484	0 = 600.53	P = 550.41	RN/L = 3.0214		
SECTION 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV							
.708	-.2944	-.3366	-.3736	-.4314	-.4243	-.4182	
.757	-.3261	-.3597	-.3769	-.4255	-.0000	-.4118	
.805	-.3387	-.3639	-.3814	-.4246	-.4243	-.4077	
.857	-.3515	-.3716	-.3952	-.4319	-.4264	-.4101	
.958	-.3613	-.3925	-.4613	-.4911	-.4599	-.4664	
ALPHA (3) = 3.928	BETA (3) = 4.253	MACH = 1.2484	0 = 600.53	P = 550.41	RN/L = 3.0214		
SECTION 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV							
.708	-.2983	-.3792	-.3999	-.4075	-.4091	-.4098	
.757	-.3345	-.3811	-.4005	-.4075	-.0000	-.4086	
.805	-.3500	-.3864	-.4006	-.4084	-.4117	-.4058	
.887	-.3709	-.3914	-.4041	-.4148	-.4151	-.4055	
.958	-.3940	-.4037	-.4264	-.4516	-.4459	-.4572	
ALPHA (4) = 7.851	BETA (1) = -3.877	MACH = 1.2474	0 = 600.07	P = 550.87	RN/L = 3.0223		
SECTION 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV							
.708	-.3064	-.3562	-.3689	-.4784	-.4732	-.4666	
.757	-.3343	-.3581	-.3727	-.4635	-.0000	-.4561	
.865	-.3433	-.3633	-.3822	-.4587	-.4704	-.4500	
.827	-.3604	-.3699	-.3935	-.4609	-.4689	-.4459	
.958	-.3811	-.3632	-.4213	-.4705	-.4808	-.4858	
ALPHA (4) = 7.971	BETA (2) = .182	MACH = 1.2474	0 = 600.07	P = 550.87	RN/L = 3.0223		
SECTION 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV							
.708	-.3060	-.3798	-.4005	-.4569	-.4505	-.4446	
.757	-.3398	-.3917	-.421	-.4589	-.0000	-.4389	
.805	-.3555	-.3865	-.4069	-.4486	-.4503	-.4344	
.837	-.3705	-.3949	-.4168	-.4546	-.4517	-.4371	
.952	-.3784	-.3660	-.4579	-.4937	-.4826	-.4699	

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB SPEED BRAKE
 $\alpha_{\text{MACH}} = 7.972 \quad \beta_{\text{MACH}} = 1.2474 \quad q = 600.07 \quad p = 550.87 \quad r_n/l = 3.0223$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.3179	-.4011	-.4255	-.4300	-.4324
Z/BV	.757	-.3509	-.4039	-.4255	-.4300	-.4312
	.805	-.3704	-.4056	-.4257	-.4305	-.4295
	.897	-.3897	-.4189	-.4262	-.4338	-.4336
	.958	-.4070	-.4241	-.4338	-.4587	-.4809

$\alpha_{\text{MACH}} = 11.905 \quad \beta_{\text{MACH}} = 1.1 = -3.844 \quad q = 1.2483 \quad p = 600.41 \quad r_n/l = 3.0228$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.3137	-.3579	-.3784	-.4970	-.4906	-.4849
Z/BV	.757	-.3420	-.3681	-.3831	-.4790	-.0000	-.4738
	.805	-.3543	-.3717	-.3921	-.4747	-.4875	-.4667
	.897	-.3703	-.3837	-.4096	-.4755	-.4852	-.4673
	.958	-.3905	-.4120	-.4302	-.4769	-.4927	-.5013

$\alpha_{\text{MACH}} = 11.915 \quad \beta_{\text{MACH}} = 1.2 = 1.187 \quad q = 1.2483 \quad p = 600.41 \quad r_n/l = 3.0228$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.708	-.3203	-.4001	-.4185	-.4723	-.4694	-.4644
Z/BV	.757	-.3564	-.4027	-.4218	-.4671	-.0000	-.4592
	.805	-.3733	-.4080	-.4261	-.4552	-.4697	-.4554
	.897	-.3913	-.4126	-.4350	-.4715	-.4715	-.4577
	.958	-.4004	-.4126	-.4673	-.5097	-.4990	-.5071

$\alpha_{\text{MACH}} = 11.907 \quad \beta_{\text{MACH}} = 1.3 = 1.269 \quad q = 1.2483 \quad p = 600.41 \quad r_n/l = 3.0228$

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.709	-.3263	-.4141	-.4417	-.4398	-.4457	-.4490
Z/BV	.757	-.2550	-.4181	-.4407	-.4412	-.0000	-.4492
	.805	-.3824	-.4252	-.4400	-.4421	-.4490	-.4485
	.897	-.4226	-.4365	-.4407	-.4471	-.4519	-.4542
	.958	-.4193	-.4607	-.4455	-.4547	-.4730	-.4977

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R SPEED BRAKE

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REFERENCE DATA

SREF =	2690.0000	SQ.FT.	XMRP =	1076.6900	IN. X0
LREF =	474.8000	IN.	YMRP =	.0000	IN. Y0
BREF =	935.0680	IN.	ZMRP =	375.0000	IN. Z0
SCALE =	.0200				

$$\text{ALPHA} (1) = -4.047 \quad \text{BETA} (1) = -3.843 \quad \text{MACH} = 1.1022 \quad 0 = 601.66 \quad P = 707.48 \quad \text{RNL} = 3.1693$$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY	-3345	-4155	-4392	-5575	-5541	-5547
.703	-3594	-4164	-4468	-5424	-5003	-5436
.757	-3650	-4231	-4515	-5381	-5585	-5355
.805	-4019	-4271	-4645	-5391	-5556	-5390
.887	-4076	-4114	-4383	-5284	-5615	-5929

$$\text{ALPHA} (1) = -3.971 \quad \text{BETA} (2) = .189 \quad \text{MACH} = 1.1022 \quad 0 = 601.66 \quad P = 707.48 \quad \text{RNL} = 3.1693$$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY	-3325	-4374	-4659	-5608	-5523	-5475
.757	-3710	-4398	-4693	-5478	-5003	-5397
.905	-3957	-4460	-4750	-5449	-5525	-5319
.987	-4139	-4509	-4687	-5535	-5570	-5363
.959	-4087	-4276	-4381	-5093	-5655	-6041

$$\text{ALPHA} (1) = -3.998 \quad \text{SETA} (3) = 4.285 \quad \text{MACH} = 1.1022 \quad 0 = 601.66 \quad P = 707.48 \quad \text{RNL} = 3.1693$$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY	-3633	-4552	-4925	-5459	-5455	-5431
.757	-3950	-4684	-4930	-5374	-5000	-5386
.805	-4116	-4721	-4933	-5337	-5439	-5341
.897	-4206	-4729	-4973	-5311	-5433	-5339
.969	-4299	-4292	-4531	-5204	-5530	-5841

PARAMETRIC DATA

RUDDER =	.000	SPDBRK =	.000
BLDFLAP =	-11.700	L-ELVN =	.000
R-ELVN =	.000	MACH =	1.100

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$$\text{ALPHA} (2) = -0.036 \quad \text{BETA} (1) = -3.867 \quad \text{MACH} = 1.1011 \quad Q = 601.17 \quad P = 708.39 \quad RN/L = 3.1906$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.738	-.3340	-.4500	-.4773	-.6002	-.5900	-.5850
.757	-.3758	-.4514	-.4792	-.5788	-.0000	-.5755
.805	-.4015	-.4559	-.4851	-.5717	-.5857	-.5670
.897	-.4260	-.4558	-.4974	-.5616	-.5788	-.5615
.958	-.4284	-.4172	-.4489	-.5140	-.5599	-.5895

$$\text{ALPHA} (2) = -.059 \quad \text{BETA} (1, 2) = .183 \quad \text{MACH} = 1.1011 \quad Q = 601.17 \quad P = 708.39 \quad RN/L = 3.1906$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.759	-.3289	-.4550	-.4907	-.5834	-.5759	-.5721
.757	-.3721	-.4574	-.4926	-.5697	-.0000	-.5647
.805	-.3999	-.4640	-.4971	-.5633	-.5749	-.5579
.897	-.4225	-.4665	-.5044	-.5619	-.5749	-.5596
.958	-.4332	-.4158	-.4561	-.5491	-.5962	-.6258

$$\text{ALPHA} (2) = -.052 \quad \text{BETA} (1, 3) = 4.261 \quad \text{MACH} = 1.1011 \quad Q = 601.17 \quad P = 708.39 \quad RN/L = 3.1906$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B: .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.726	-.3427	-.4905	-.5288	-.5751	-.5753	-.5736
.757	-.3934	-.4922	-.5274	-.5677	-.0000	-.5687
.805	-.4209	-.4984	-.5288	-.5632	-.5715	-.5637
.897	-.4459	-.4924	-.5281	-.5575	-.5687	-.5524
.958	-.4472	-.4310	-.4534	-.5156	-.5592	-.5837

$$\text{ALPHA} (3) = 3.056 \quad \text{BETA} (1) = -3.869 \quad \text{MACH} = 1.1013 \quad Q = 601.26 \quad P = 708.16 \quad RN/L = 3.1839$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.709	-.3302	-.4732	-.5035	-.6225	-.6111	-.6059
.751	-.3731	-.4726	-.5255	-.6026	-.0000	-.5950
.805	-.4376	-.4735	-.5134	-.5929	-.6042	-.5863
.897	-.4575	-.4561	-.5233	-.5813	-.5957	-.5849
.958	-.4653	-.4458	-.4634	-.5153	-.5605	-.5780

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TABULATED PRESSURE DATA - DAIRY (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

(XEBG20)

ALPHA (3) = 3.924 BETA (2) = .189 MACH = 1.1013 O = 601.26 P = 708.16 RNL = 3.1839

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.3324 -.4754 -.5171 -.6012 -.5966 -.5945

.757 -.3782 -.4775 -.5166 -.5897 .0000 -.5857

.805 -.4098 -.4832 -.5199 -.5859 -.5938 -.5796

.897 -.4352 -.4884 -.5212 -.5729 -.5890 -.5838

.958 -.4286 -.4247 -.4501 -.5213 -.5796 -.6206

ALPHA (3) = 3.921 BETA (3) = 4.251 MACH = 1.1013 O = 601.26 P = 708.16 RNL = 3.1839

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .3399 -.5050 -.5531 -.5950 -.5929 -.5917

.757 -.3889 -.5052 -.5512 -.5875 .0000 -.5825

.805 -.4235 -.5124 -.5498 -.5822 -.5853 -.5780

.897 -.4560 -.5177 -.5486 -.5730 -.5820 -.5774

.958 -.4617 -.4655 -.4747 -.5147 -.5555 -.5843

ALPHA (4) = 7.863 BETA (1) = -3.864 MACH = 1.1008 O = 600.53 P = 707.91 RNL = 3.1857

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .3419 -.4852 -.5172 -.6498 -.6408 -.6337

.708 -.3322 -.4967 -.5215 -.6275 .0000 -.6185

.855 -.4223 -.4353 -.5279 -.6192 -.6318 -.6062

.897 -.4517 -.4948 -.5395 -.6057 -.6209 -.5946

.953 -.4516 -.4949 -.4812 -.5274 -.5744 -.5551

ALPHA (4) = 7.855 BETA (2) = .180 MACH = 1.1008 O = 600.53 P = 707.91 RNL = 3.1857

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .3352 -.4979 -.5456 -.6299 -.6204 -.6174

.757 -.3872 -.495 -.5451 -.6148 .0000 -.6079

.855 -.4243 -.5259 -.5475 -.6059 -.6150 -.6010

.897 -.4511 -.5131 -.5841 -.5911 -.6062 -.6084

.952 -.4479 -.4458 -.4555 -.5108 -.5648 -.6015

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE							(XEBK20)				
ALPHA (1) =	7.863	BETA (3) =	4.247	MACH =	1.1008	Q =	600.53	P	707.91	RNL	3.1857
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920					
X/CV											
.708	-.3569	-.5240	-.5759	-.6052	-.6071	-.6041					
.757	-.4088	-.5264	-.5725	-.6007	-.6000	-.6010					
.805	-.4438	-.5340	-.5718	-.5965	-.6038	-.5959					
.897	-.4762	-.5383	-.5676	-.5811	-.5979	-.5827					
.958	-.4752	-.4801	-.4924	-.5202	-.5583	-.5452					
ALPHA (5) =	11.903	BETA (1) =	-3.846	MACH =	1.1003	0 =	600.53	P =	708.60	RNL	3.1882
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920					
X/CV											
.708	-.3617	-.5024	-.5341	-.6679	-.6603	-.6524					
.757	-.4063	-.5088	-.5362	-.6465	-.6000	-.6330					
.805	-.4395	-.5083	-.5426	-.6370	-.6509	-.6214					
.887	-.4657	-.5139	-.5554	-.6254	-.6392	-.6169					
.958	-.4640	-.4639	-.4954	-.5462	-.5929	-.5679					
ALPHA (5) =	11.911	BETA (2) =	.188	MACH =	1.1003	0 =	600.53	P =	708.60	RNL	3.1882
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920					
X/CV											
.708	-.3547	-.5142	-.5625	-.6326	-.6316	-.6290					
.757	-.4019	-.5164	-.5613	-.6219	-.6000	-.6224					
.805	-.4417	-.5247	-.5622	-.6136	-.6247	-.6160					
.887	-.4729	-.5310	-.5632	-.6011	-.6155	-.6168					
.958	-.4695	-.4590	-.4633	-.5159	-.5654	-.5897					
ALPHA (5) =	11.905	BETA (3) =	4.263	MACH =	1.1003	0 =	600.53	P =	708.60	RNL	3.1882
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920					
X/CV											
.708	-.3707	-.5115	-.5961	-.6044	-.6082	-.6151					
.757	-.4214	-.5439	-.5897	-.5954	-.0000	-.6078					
.805	-.5022	-.5536	-.5669	-.5942	-.6104	-.6042					
.887	-.4215	-.5538	-.5736	-.5897	-.6056	-.6008					
.958	-.4511	-.4935	-.5018	-.5359	-.5698	-.5602					

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-07310A14B) - 140A/B/C/R ORB SPEED BRAKE

(1XEB211 (13 AUG 75)

REFERENCE DATA

PARAMETRIC DATA						
RUDDER =	.000	SPOBRK =	.000	L-ELVN =	.000	MACH = .900
BDFLAP =	-11.700	R-ELVN =	.000			
ALPHA (1) = -4.037	BETA (1) = -3.849	MACH = .90000	0 = 600.22	P = 1058.5	RNL = 3.5693	
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z_B1	.3170	.4120	.5070	.6020	.6970	.7920
X_CV						
.759	-2802	-5954	-6558	-6177	-5099	-4052
.757	-12513	-15955	-15549	-5108	.0000	-4074
.925	-4256	-5321	-6404	-5867	-4713	-3974
.631	-5549	-5585	-5263	-5390	-4430	-3726
.358	-3561	-2918	-2607	-3569	-3938	-2776
ALPHA (1) = -4.030	BETA (2) = .192	MACH = .90000	0 = 600.22	P = 1058.5	RNL = 3.5693	
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z_B1	.3170	.4120	.5070	.6020	.6970	.7920
X_CV						
.759	-2329	-6171	-7003	-8020	-7023	-6096
.757	-3770	-6147	-6349	-7704	.0000	-5816
.925	-6260	-6226	-5892	-7446	-6476	-5581
.631	-4750	-5984	-6743	-7030	-6237	-5368
.358	-3765	-2911	-3039	-4695	-5676	-4188
ALPHA (1) = -4.032	BETA (3) = .4289	MACH = .90000	0 = 600.22	P = 1058.5	RNL = 3.5693	
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z_B1	.3170	.4120	.5070	.6020	.6970	.7920
X_CV						
.759	-3224	-5726	-6397	-8429	-8353	-7751
.757	-3567	-5725	-6337	-9109	.0000	-6627
.925	-4245	-5771	-6276	-7945	-7789	-6169
.631	-4533	-5779	-6375	-7691	-7374	-5957
.358	-3929	-5713	-5101	-5359	-6584	-4503

ARMED-ARMED PRESSIONER DATA - QAHG (AMES 11-073-1)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE							PAGE 6241				
ALPHA (3) =	3.375	BETA (2) =	.188	MACH =	.89950	O =	599.38	P =	1058.3	R/V/L =	3.5682
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z-B.	.3170	.4120	.5070	.6020	.6970	.7920					
X/CP											
.1738	- .26562	- .55220	- .5752	- .7120	- .6423	- .5730					
.1757	- .3263	- .5122	- .5721	- .6764	- .5000	- .5391					
.1825	- .3220	- .5013	- .5586	- .6627	- .5934	- .5142					
.1835	- .4058	- .5346	- .5563	- .6350	- .5757	- .4986					
.1853	- .3167	- .2533	- .2636	- .4299	- .5278	- .3795					
ALPHA (3) =	3.372	BETA (3) =	4.260	MACH =	.89950	O =	599.38	P =	1058.3	R/V/L =	3.5682
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z-B.	.3170	.4120	.5070	.6020	.6970	.7920					
X/CP											
.1738	- .26563	- .5146	- .5198	- .7792	- .7483	- .6755					
.1757	- .3135	- .4759	- .5220	- .7271	- .0000	- .5545					
.1825	- .3532	- .5772	- .5326	- .7396	- .6746	- .5056					
.1835	- .3593	- .4651	- .5453	- .6917	- .6384	- .4861					
.1853	- .3557	- .2532	- .2878	- .4915	- .5773	- .3637					
ALPHA (4) =	7.305	BETA (4) =	11.870	MACH =	.89943	O =	599.41	P =	1058.5	R/V/L =	3.5682
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z-B.	.3170	.4120	.5070	.6020	.6970	.7920					
X/CP											
.1738	- .2656	- .2398	- .4635	- .5397	- .5475	- .4441	- .3192				
.1757	- .3235	- .4458	- .5080	- .5299	- .0003	- .3202					
.1825	- .2322	- .4571	- .5598	- .5118	- .4055	- .3140					
.1835	- .3540	- .4537	- .4693	- .4591	- .3744	- .2928					
.1853	- .3555	- .2756	- .3270	- .3238	- .3297	- .2103					
ALPHA (4) =	9.317	BETA (4) =	21.20	MACH =	.89943	O =	599.41	P =	1058.5	R/V/L =	3.5682
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP											
Z-B.	.3170	.4120	.5070	.6020	.6970	.7920					
X/CP											
.1738	- .26572	- .5052	- .5553	- .5822	- .6249	- .5585					
.1757	- .3311	- .4635	- .5435	- .5350	- .5150	- .5161					
.1825	- .2322	- .4555	- .5573	- .5349	- .4957	- .5556					
.1835	- .3542	- .4562	- .4668	- .4512	- .3550	- .4622					
.1853	- .3557	- .2757	- .3272	- .3237	- .3298	- .2103					

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

	SREF = 2530.0000 SC.FT.	YMRP = 1076.6800 IN. X0	SPDBRK = .000	(XE8K22) (13 AUG 75)
LSEF = 474.3000 IN.	YPRP = .0000 IN. Y0	BDFLAP = -11.700	L-ELVN = .000	
AEF = 936.0560 IN.	ZMRP = 375.0000 IN. Z0	R-ELVN = .000	MACH = .600	
ALPHA (1) = -4.345	BETA (1) = -7.856	MACH = .59680	Q = 594.79	P = 2385.6 RN/L = 4.8530
SECTION : 1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP			
Z/EV .3170 .4120 .5070 .6020 .6970 .7920	X/CV			
.728 -.1353 -.2394 -.2350 -.3345 -.2899 -.2861				
.757 -.1935 -.2444 -.2067 -.3167 -.0000 -.2798				
.805 -.2171 -.2644 -.2514 -.3031 -.2875 -.2759				
.887 -.2124 -.2354 -.2495 -.2920 -.2834 -.2698				
.959 -.1373 -.1437 -.1399 -.2035 -.2476 -.2094				
ALPHA (1) = -3.970	BETA (2) = -3.843	MACH = .59680	Q = 594.79	P = 2385.6 RN/L = 4.8530
SECTION : 1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP			
Z/EV .3170 .4120 .5070 .6020 .6970 .7920	X/CV			
.709 -.2230 .1081 -.3339 -.3995 -.3419 -.3610				
.757 -.2264 -.3056 -.3871 -.3871 -.0000 -.3343				
.805 -.2537 -.3081 -.3293 -.3731 -.3436 -.3193				
.887 -.2533 -.2343 -.3335 -.3553 -.3372 -.3173				
.959 -.1937 -.1448 -.1300 -.2375 -.3172 -.2279				
ALPHA (1) = -3.957	BETA (3) = .189	MACH = .59680	Q = 594.79	P = 2385.6 RN/L = 4.8530
SECTION : 1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP			
Z/EV .3170 .4120 .5070 .6020 .6970 .7920	X/CV			
.733 -.2157 -.2465 -.3934 -.3680 -.3351 -.3625				
.757 -.2129 -.3531 -.3954 -.3799 .0000 -.3363				
.805 -.2176 -.3577 -.3844 -.3737 -.2439 -.3344				
.887 -.2131 -.3425 -.3711 -.3429 -.3377 -.3211				
.959 -.2149 -.1635 -.1531 -.2448 -.3282 -.2385				

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 1140A/B/C/R ORB SPEED BRAKE
ALPHA (1) = -3.965 BETA (4) = .4.271 MACH = .59680 Q = -594.79 P = -2385.6 RNL = 4.8530SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2248 -.3419 -.3964 -.3278 -.2723 -.2925
.757 -.2521 -.3457 -.3902 -.3230 .0000 -.2771
.805 -.2780 -.3533 -.3726 -.3123 -.2668 -.2473
.887 -.2820 -.3380 -.3497 -.2890 -.2592 -.2118
.968 -.2222 -.1683 -.1496 -.1895 -.2297 -.1204

ALPHA (10) = -4.005 BETA (5) = .8.350 MACH = .59680 Q = -594.79 P = -2385.6 RNL = 4.8530

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2154 -.2755 -.2800 -.2375 -.2373 -.2604
.757 -.2308 -.2691 -.2793 -.2418 .0000 -.2463
.805 -.2455 -.2729 -.2676 -.2397 -.2430 -.2330
.887 -.2396 -.2612 -.2576 -.2378 -.2397 -.2131
.968 -.2016 -.1614 -.1345 -.1748 -.2125 -.1546

ALPHA (20) = -.025 BETA (1) = -7.896 MACH = .59678

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.1703 -.1670 -.0548 -.3136 -.2976 -.2647
.757 -.1715 -.1772 -.0772 -.2610 .0000 -.2435
.805 -.1736 -.1380 -.1407 -.2545 -.2852 -.2375
.887 -.1560 -.1195 -.1266 -.2549 -.2623 -.2377
.968 -.1525 -.1103 -.0977 -.1769 -.2256 -.1830

ALPHA (2) = -.014 BETA (2) = -3.863 MACH = .55378

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.1951 -.3017 -.3207 -.3567 -.3317 -.3503
.757 -.2237 -.3021 -.3212 -.3455 .0000 -.3238
.805 -.2532 -.3052 -.3186 -.3434 -.3353 -.3090
.887 -.2579 -.2869 -.3097 -.3326 -.3303 -.3001
.968 -.2058 -.1507 -.1291 -.2279 -.3062 -.2122

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(DA148) -140A/B/C/R ORB SPEED BRAKE						
ALPHA (2) =	.070	BETA (3) =	.189	MACH =	.59678	Q = 594.66
SECTION : 1) RIGHT HAND INSIDE						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
- .739	- .2130	- .3455	- .3941	- .3910	- .3241	- .3448
- .757	- .2515	- .3445	- .3856	- .3787	.0000	-.3205
-.805	- .2733	- .3512	- .3798	- .3641	-.3210	-.3126
-.897	- .2797	- .3343	- .3677	- .3448	-.3212	-.2990
-.958	- .2187	- .1667	- .1610	- .2361	-.3028	-.2171
ALPHA (2) = .063	BETA (4) = 4.250	MACH = .59678	0	= 594.66	P = 2385.3	RNL = 4.8568
SECTION : 1) RIGHT HAND INSIDE						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
- .729	- .2173	- .3413	- .3390	- .3048	-.2605	- .2813
-.757	- .2550	- .3399	- .3806	-.3072	.0000	-.2624
-.855	- .2745	- .3462	- .3655	-.3005	-.2617	-.2446
-.887	- .2773	- .3353	- .3408	-.2834	-.2524	-.2206
-.953	- .2322	- .1792	- .1552	-.1893	-.2324	-.1404
ALPHA (2) = .058	BETA (5) = 8.310	MACH = .59678	0	= 594.66	P = 2385.3	RNL = 4.8568
SECTION : 1) RIGHT HAND INSIDE						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
- .709	- .2128	- .2628	- .2801	-.2276	-.2283	-.2414
-.757	- .2255	- .2639	- .2768	-.2283	.0000	-.2402
-.805	- .2342	- .2533	- .2668	-.2309	-.2295	-.2247
-.837	- .2359	- .2563	- .2520	-.2240	-.2288	-.2142
-.953	- .2272	- .1725	- .1344	-.1698	-.2090	-.1559
ALPHA (3) = 3.933	BETA (1) = -7.911	MACH = .59760	0	= 596.20	P = 2385.0	RNL = 4.8680
SECTION : 1) RIGHT HAND INSIDE						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
- .709	- .1667	- .1615	-.0527	-.2689	-.2784	-.2584
-.757	- .1531	- .1470	-.0608	-.2283	.0000	-.2235
-.805	- .1643	- .1285	-.0817	-.2269	-.2608	-.2233
-.837	- .1531	- .1153	-.1142	-.2295	-.2449	-.2269
-.953	- .1518	- .1044	-.0902	-.1606	-.2095	-.1740

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TABULATED PRESSURE DATA - OAI:48 (AMES 11-073-1)

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AMES 11-073(CA148) - 140A/B/C/R ORB SPEED BRAKE						(XEBK2)					
ALPHA (3) =	3.935	BETA (2) =	-3.856	MACH =	.59760	Q =	.596.20	P =	2385.0	RNL =	4.8680
SECTION 1: RIGHT HAND INSIDE											
Z/CY	.3170	.4120	.5070	.6020	.6970	.7920					
X/CY											
-.759	-.2127	-.3323	-.3754	-.3497	-.3048	-.3240					
-.757	-.2435	-.3736	-.3723	-.3475	.0000	-.3021					
-.636	-.2635	-.3517	-.3539	-.3339	-.2931	-.2951					
-.635	-.2697	-.3571	-.3559	-.3214	-.2857	-.2854					
-.553	-.2132	-.1637	-.1621	-.2153	-.2336	-.2059					
ALPHA (3) = 4.025 BETA (4) = 4.240 MACH = .59760											
Z/CY	.3170	.4120	.5070	.6020	.6970	.7920					
SECTION 4: RIGHT HAND INSIDE											
Z/CY	.3170	.4120	.5070	.6020	.6970	.7920					
X/CY											
-.758	-.2131	-.3332	-.3692	-.2902	-.2478	-.2630					
-.757	-.2398	-.3341	-.3587	-.2932	.0000	-.2464					
-.635	-.2559	-.3615	-.3473	-.2639	-.2497	-.2359					
-.557	-.2526	-.3196	-.3178	-.2655	-.2457	-.2244					
-.553	-.2532	-.1817	-.1398	-.1789	-.2221	-.1569					
ALPHA (3) = 4.025 BETA (5) = 8.292 MACH = .59760											
Z/CY	.3170	.4120	.5070	.6020	.6970	.7920					
SECTION 1: RIGHT HAND INSIDE											
Z/CY	-.2020	-.2543	-.25659	-.2145	-.2155	-.2228					
-.151	-.2169	-.2619	-.2637	-.2149	.0000	-.2293					
-.151	-.2562	-.2615	-.2515	-.2141	-.2145	-.2169					
-.151	-.2571	-.2615	-.2389	-.2146	-.2150	-.2023					
-.151	-.2510	-.1667	-.1291	-.1535	-.1933	-.1492					

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE (XEBK22)										ORIGINAL PAGE IS OF POOR QUALITY	
ALPHA (deg)	BETA (deg)	MACH	Q	P	R/N/L	ALPHA (deg)	BETA (deg)	MACH	Q	P	R/N/L
SECTION: (1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP										
Z: 3:	.3173	.4120	.5070	.6020	.6970	.7920	X: CV				
ALPHA (deg) = 7.33: BETA (deg) = 7.913: SECTION: (1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP										
Z: 3:	.3173	.4120	.5070	.6020	.6970	.7920	X: CV				
ALPHA (deg) = 8.049: SECTION: (1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP										
Z: 3:	.3173	.4120	.5070	.6020	.6970	.7920	X: CV				
ALPHA (deg) = 9.309: BETA (deg) = 9.309: SECTION: (1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP										
Z: 3:	.3173	.4120	.5070	.6020	.6970	.7920	X: CV				

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TABULATED PRESSURE DATA - DATA FOR MACH = 3.840

AMES 11-073(CALIB) - 11-073(B.C.D. 11-073(A.C.D.))

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 $\text{ALPHA} + \text{E} = 8.348$ $\text{BETA} + \text{S} = 8.297$ $\text{MACH} = 3.840$ $\text{P} = 2385.1$
 $\text{RN/L} = 4.8632$ (XEBK22)

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.758	-.1914	-.2322	-.2536	-.2087	-.2020	-.2144
.757	-.1935	-.2371	-.2382	-.1956	.0000	-.2137
.855	-.2166	-.2363	-.2169	-.1954	-.2037	-.2036
.867	-.2225	-.2275	-.2353	-.1970	-.2056	-.2031
.898	-.2197	-.2515	-.1540	-.1516	-.1654	-.1544

 $\text{ALPHA} + \text{S} = 11.963$ $\text{BETA} + \text{I} = 7.860$ $\text{MACH} = .59774$ $\text{P} = 596.43$
 $\text{RN/L} = 4.8734$ (XEBK22)

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.758	-.1526	-.1654	-.0561	-.2129	-.2494	-.2547
.757	-.1915	-.1478	-.0535	-.0858	.0000	-.2392
.855	-.1573	-.1365	-.0787	-.1903	-.2459	-.2231
.867	-.1537	-.1227	-.1133	-.1959	-.2414	-.2283
.898	-.1819	-.1516	-.1157	-.1437	-.2055	-.1946

 $\text{ALPHA} + \text{E} = 11.965$ $\text{BETA} + \text{I} = 3.840$ $\text{MACH} = .59774$ $\text{P} = 596.43$
 $\text{RN/L} = 4.8734$ (XEBK22)

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.758	-.1837	-.2724	-.2851	-.3167	-.2706	-.2762
.757	-.2104	-.2693	-.2825	-.2938	.0000	-.2499
.855	-.2241	-.2325	-.2327	-.2884	-.2618	-.2378
.867	-.2362	-.2622	-.2611	-.2782	-.2554	-.2287
.898	-.2147	-.1650	-.1269	-.1603	-.2340	-.1551

 $\text{ALPHA} + \text{S} = 12.003$ $\text{BETA} + \text{I} = 1.181$ $\text{MACH} = .59774$ $\text{P} = 596.43$
 $\text{RN/L} = 4.8734$ (XEBK22)

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.758	-.2569	-.3170	-.3550	-.3132	-.2718	-.2882
.757	-.2362	-.3155	-.3515	-.3108	.0000	-.2713
.855	-.2535	-.3163	-.3243	-.3052	-.2705	-.2616
.867	-.2636	-.3224	-.3277	-.2853	-.2690	-.2527
.898	-.2135	-.1135	-.1136	-.1919	-.2480	-.1732

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE (XEBK22)							PAGE 6249
ALPHA (5) = 12.027	BETA (4) = 4.252	MACH = .59774	Q = 596.43	P = 2384.9	R/N/L = 4.8734	DEPENDENT VARIABLE CP	
SECTION 1: RIGHT HAND INSIDE							
Z-34	.3170	.4120	.5070	.6020	.6970	.7920	X-CY
.1739	-.1979	-.3105	-.3656	-.2510	-.2198	-.2298	.1757
.1826	-.2313	-.3112	-.3168	-.2508	.0000	-.2239	.1637
.1637	-.2538	-.3187	-.3521	-.2486	-.2222	-.2141	.2619
.263	-.2492	-.1982	-.1476	-.1585	-.2127	-.2102	-.1994
SECTION 2: RIGHT HAND INSIDE							DEPENDENT VARIABLE CP
Z-34	.3170	.4120	.5070	.6020	.6970	.7920	X-CY
.1854	-.1854	-.2257	-.2441	-.1729	-.1911	-.2073	.2035
.1850	-.2035	-.2174	-.2391	-.1667	.0000	-.2021	-.2153
.1858	-.2153	-.2259	-.2259	-.1854	-.2030	-.2002	-.2131
.1858	-.2131	-.2125	-.2125	-.1757	-.1973	-.2028	-.2125
.1858	-.2125	-.2058	-.1617	-.1353	-.1757	-.1715	-.2058

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C/R SPEED BRAKE

!XEBK231

$\alpha_{\text{DATA}} = 2.1 = .005 \quad \beta_{\text{ETA}} = 1.1 = -3.877 \quad \text{MACH} = 1.3947 \quad 0 = 599.32 \quad P = 440.18 \quad RNL = 2.9066$

SECTION : 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .2421 -.2543 -.2261 -.3013 -.2948 -.2901

.157 -.2571 -.2528 -.2375 -.2929 .0000 -.2756

.165 -.2595 -.2567 -.2444 -.2922 -.2927 -.2684

.167 -.2665 -.2654 -.2611 -.2959 -.2937 -.2716

.169 -.3501 -.3535 -.3539 -.3529 -.3196 -.3220

$\alpha_{\text{DATA}} = 2.1 = .011 \quad \beta_{\text{ETA}} = 2.1 = .183 \quad \text{MACH} = 1.3947 \quad 0 = 599.32 \quad P = 440.18 \quad RNL = 2.9066$

SECTION : 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .2375 -.2239 -.2707 -.2824 -.2633 -.2581

.157 -.2569 -.2661 -.2731 -.2812 .0000 -.2507

.165 -.2651 -.2624 -.2752 -.2797 -.2645 -.2467

.167 -.2813 -.2857 -.2828 -.2831 -.2657 -.2523

.169 -.3114 -.3566 -.3651 -.3399 -.3016 -.3125

$\alpha_{\text{DATA}} = 2.1 = .023 \quad \beta_{\text{ETA}} = 3.1 = 4.256 \quad \text{MACH} = 1.3947 \quad 0 = 599.32 \quad P = 440.18 \quad RNL = 2.9066$

SECTION : 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .2395 -.2811 -.2933 -.2623 -.2561 -.2563

.157 -.2718 -.2649 -.2929 -.2651 .0000 -.2549

.165 -.2785 -.2833 -.2810 -.2569 -.2582 -.2523

.167 -.2967 -.2976 -.2919 -.2729 -.2623 -.2514

.169 -.3218 -.3647 -.3629 -.3541 -.2986 -.3065

$\alpha_{\text{DATA}} = 3.925 \quad \beta_{\text{ETA}} = 1.1 = -3.879 \quad \text{MACH} = 1.3946 \quad 0 = 599.62 \quad P = 440.42 \quad RNL = 2.9033$

SECTION : 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .2549 -.2743 -.2424 -.3320 -.3233 -.3190

.157 -.2720 -.2722 -.2595 -.3225 .0000 -.3057

.165 -.2750 -.2779 -.2670 -.3223 -.3225 -.2993

.167 -.3227 -.3268 -.2834 -.3268 -.3235 -.3014

.169 -.3141 -.3255 -.3559 -.3762 -.3477 -.3476

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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AMES 11-07310A14B) -140A/B/C/R ORB SPEED BRAKE

ALPHA (31) = 3.958 BETA (21) = .183 MACH = 1.3946 Q = 599.62 P = 440.42 RN/L = 2.9033

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.753	.2503	.2937	.2985	.3079	.2945	.2903
.757	.2763	.2949	.3008	.3062	.0000	.2844
.805	.2844	.2973	.3024	.3067	.2953	.2801
.887	.3001	.3254	.3053	.3115	.2977	.2805
.953	.3325	.3557	.3893	.3556	.3286	.3357

(XEBK23)

(XEBK23)

ALPHA (3) = 3.971 BETA (31) = 4.247 MACH = 1.3946 Q = 599.62 P = 440.42 RN/L = 2.9033

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758	.2600	.3095	.3254	.2852	.2781	.2803
.757	.2557	.3122	.3232	.2900	.0000	.2793
.865	.2859	.3150	.3211	.2907	.2824	.2772
.887	.3117	.3233	.3185	.2962	.2852	.2780
.953	.3358	.3619	.3745	.3529	.3197	.3314

ALPHA (4) = 7.933 BETA (1) = -3.869 MACH = 1.3941 Q = 599.51 P = 440.65 RN/L = 2.9093

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.753	.2720	.2965	.2742	.3625	.3530	.3470
.757	.2935	.2953	.2930	.3518	.0000	.3337
.805	.2959	.3237	.2925	.3496	.3513	.3280
.887	.3059	.3215	.3092	.3549	.3499	.3309
.953	.3354	.3555	.3851	.3991	.3725	.3753

ALPHA (4) = 7.939 BETA (21) = .178 MACH = 1.3941 Q = 599.51 P = 440.65 RN/L = 2.9093

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758	.2547	.3178	.3255	.3355	.3253	.3206
.757	.2525	.3157	.3269	.3348	.0000	.3139
.835	.2534	.3235	.3291	.3338	.3249	.3104
.887	.3152	.3511	.3559	.3535	.3259	.3111
.953	.3392	.3757	.4063	.3983	.3553	.3609

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -14CA/B/C/R ORB SPEED BRAKE

SET14: 11:RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-B: .3170 .4120 .5070 .6020 .6970 .7920

* C1: -.3508 -.3294 -.3195 -.3098 -.3012 -.3798

* C2: -.3555 -.3289 -.3271 -.3201 .0000 -.3684

* C3: -.3537 -.3270 -.3237 -.3333 -.3867 -.3860

* C4: -.3519 -.3256 -.3201 -.3372 -.3282 -.3920

* C5: -.3502 -.3236 -.3204 -.3300 -.4195 -.4311

* C6: -.3487 -.3215 -.3175 -.3144 -.4036 -.4031

* C7: -.3473 -.3195 -.3154 -.3124 -.3920 -.3920

* C8: -.3458 -.3175 -.3134 -.3104 -.3820 -.3820

* C9: -.3443 -.3155 -.3114 -.3084 -.3720 -.3720

* C10: -.3427 -.3135 -.3094 -.3064 -.3620 -.3620

* C11: -.3412 -.3115 -.3074 -.3044 -.3520 -.3520

* C12: -.3397 -.3094 -.3054 -.3024 -.3420 -.3420

* C13: -.3382 -.3074 -.3034 -.3004 -.3320 -.3320

* C14: -.3367 -.3054 -.3014 -.2984 -.3220 -.3220

* C15: -.3352 -.3034 -.2994 -.2964 -.3120 -.3120

* C16: -.3337 -.3014 -.2974 -.2944 -.3020 -.3020

* C17: -.3322 -.2994 -.2954 -.2924 -.2920 -.2920

* C18: -.3307 -.2974 -.2934 -.2904 -.2920 -.2920

* C19: -.3292 -.2954 -.2914 -.2884 -.2920 -.2920

* C20: -.3277 -.2934 -.2894 -.2864 -.2920 -.2920

* C21: -.3262 -.2914 -.2874 -.2844 -.2920 -.2920

* C22: -.3247 -.2894 -.2854 -.2824 -.2920 -.2920

* C23: -.3232 -.2874 -.2834 -.2804 -.2920 -.2920

* C24: -.3217 -.2854 -.2814 -.2784 -.2920 -.2920

* C25: -.3202 -.2834 -.2794 -.2764 -.2920 -.2920

* C26: -.3187 -.2814 -.2774 -.2744 -.2920 -.2920

* C27: -.3172 -.2794 -.2754 -.2724 -.2920 -.2920

* C28: -.3157 -.2774 -.2734 -.2704 -.2920 -.2920

* C29: -.3142 -.2754 -.2714 -.2684 -.2920 -.2920

* C30: -.3127 -.2734 -.2694 -.2664 -.2920 -.2920

* C31: -.3112 -.2714 -.2674 -.2644 -.2920 -.2920

* C32: -.3097 -.2694 -.2654 -.2624 -.2920 -.2920

* C33: -.3082 -.2674 -.2634 -.2604 -.2920 -.2920

* C34: -.3067 -.2654 -.2614 -.2584 -.2920 -.2920

* C35: -.3052 -.2634 -.2594 -.2564 -.2920 -.2920

* C36: -.3037 -.2614 -.2574 -.2544 -.2920 -.2920

* C37: -.3022 -.2594 -.2554 -.2524 -.2920 -.2920

* C38: -.3007 -.2574 -.2534 -.2504 -.2920 -.2920

* C39: -.3092 -.2554 -.2514 -.2484 -.2920 -.2920

* C40: -.3077 -.2534 -.2494 -.2464 -.2920 -.2920

* C41: -.3062 -.2514 -.2474 -.2444 -.2920 -.2920

* C42: -.3047 -.2494 -.2454 -.2424 -.2920 -.2920

* C43: -.3032 -.2474 -.2434 -.2404 -.2920 -.2920

* C44: -.3017 -.2454 -.2414 -.2384 -.2920 -.2920

* C45: -.3002 -.2434 -.2394 -.2364 -.2920 -.2920

* C46: -.2987 -.2414 -.2374 -.2344 -.2920 -.2920

* C47: -.2972 -.2394 -.2354 -.2324 -.2920 -.2920

* C48: -.2957 -.2374 -.2334 -.2304 -.2920 -.2920

* C49: -.2942 -.2354 -.2314 -.2284 -.2920 -.2920

* C50: -.2927 -.2334 -.2294 -.2264 -.2920 -.2920

* C51: -.2912 -.2314 -.2274 -.2244 -.2920 -.2920

* C52: -.2897 -.2294 -.2254 -.2224 -.2920 -.2920

* C53: -.2882 -.2274 -.2234 -.2204 -.2920 -.2920

* C54: -.2867 -.2254 -.2214 -.2184 -.2920 -.2920

* C55: -.2852 -.2234 -.2194 -.2164 -.2920 -.2920

* C56: -.2837 -.2214 -.2174 -.2144 -.2920 -.2920

* C57: -.2822 -.2194 -.2154 -.2124 -.2920 -.2920

* C58: -.2807 -.2174 -.2134 -.2104 -.2920 -.2920

* C59: -.2792 -.2154 -.2114 -.2084 -.2920 -.2920

* C60: -.2777 -.2134 -.2094 -.2064 -.2920 -.2920

* C61: -.2762 -.2114 -.2074 -.2044 -.2920 -.2920

* C62: -.2747 -.2094 -.2054 -.2024 -.2920 -.2920

* C63: -.2732 -.2074 -.2034 -.2004 -.2920 -.2920

* C64: -.2717 -.2054 -.2014 -.1984 -.2920 -.2920

* C65: -.2702 -.2034 -.1994 -.1964 -.2920 -.2920

* C66: -.2687 -.2014 -.1974 -.1944 -.2920 -.2920

* C67: -.2672 -.1994 -.1954 -.1924 -.2920 -.2920

* C68: -.2657 -.1974 -.1934 -.1904 -.2920 -.2920

* C69: -.2642 -.1954 -.1914 -.1884 -.2920 -.2920

* C70: -.2627 -.1934 -.1894 -.1864 -.2920 -.2920

* C71: -.2612 -.1914 -.1874 -.1844 -.2920 -.2920

* C72: -.2597 -.1894 -.1854 -.1824 -.2920 -.2920

* C73: -.2582 -.1874 -.1834 -.1804 -.2920 -.2920

* C74: -.2567 -.1854 -.1814 -.1784 -.2920 -.2920

* C75: -.2552 -.1834 -.1794 -.1764 -.2920 -.2920

* C76: -.2537 -.1814 -.1774 -.1744 -.2920 -.2920

* C77: -.2522 -.1794 -.1754 -.1724 -.2920 -.2920

* C78: -.2507 -.1774 -.1734 -.1704 -.2920 -.2920

* C79: -.2492 -.1754 -.1714 -.1684 -.2920 -.2920

* C80: -.2477 -.1734 -.1694 -.1664 -.2920 -.2920

* C81: -.2462 -.1714 -.1674 -.1644 -.2920 -.2920

* C82: -.2447 -.1694 -.1654 -.1624 -.2920 -.2920

* C83: -.2432 -.1674 -.1634 -.1604 -.2920 -.2920

* C84: -.2417 -.1654 -.1614 -.1584 -.2920 -.2920

* C85: -.2402 -.1634 -.1594 -.1564 -.2920 -.2920

* C86: -.2387 -.1614 -.1574 -.1544 -.2920 -.2920

* C87: -.2372 -.1594 -.1554 -.1524 -.2920 -.2920

* C88: -.2357 -.1574 -.1534 -.1504 -.2920 -.2920

* C89: -.2342 -.1554 -.1514 -.1484 -.2920 -.2920

* C90: -.2327 -.1534 -.1494 -.1464 -.2920 -.2920

* C91: -.2312 -.1514 -.1474 -.1444 -.2920 -.2920

* C92: -.2297 -.1494 -.1454 -.1424 -.2920 -.2920

* C93: -.2282 -.1474 -.1434 -.1404 -.2920 -.2920

* C94: -.2267 -.1454 -.1414 -.1384 -.2920 -.2920

* C95: -.2252 -.1434 -.1394 -.1364 -.2920 -.2920

* C96: -.2237 -.1414 -.1374 -.1344 -.2920 -.2920

* C97: -.2222 -.1394 -.1354 -.1324 -.2920 -.2920

* C98: -.2207 -.1374 -.1334 -.1304 -.2920 -.2920

* C99: -.2192 -.1354 -.1314 -.1284 -.2920 -.2920

* C100: -.2177 -.1334 -.1294 -.1264 -.2920 -.2920

* C101: -.2162 -.1314 -.1274 -.1244 -.2920 -.2920

* C102: -.2147 -.1294 -.1254 -.1224 -.2920 -.2920

* C103: -.2132 -.1274 -.1234 -.1204 -.2920 -.2920

* C104: -.2117 -.1254 -.1214 -.1184 -.2920 -.2920

* C105: -.2102 -.1234 -.1194 -.1164 -.2920 -.2920

* C106: -.2087 -.1214 -.1174 -.1144 -.2920 -.2920

* C107: -.2072 -.1194 -.1154 -.1124 -.2920 -.2920

* C108: -.2057 -.1174 -.1134 -.1104 -.2920 -.2920

* C109: -.2042 -.1154 -.1114 -.1084 -.2920 -.2920

* C110: -.2027 -.1134 -.1094 -.1064 -.2920 -.2920

* C111: -.2012 -.1114 -.1074 -.1044 -.2920 -.2920

* C112: -.1997 -.1094 -.1054 -.1024 -.2920 -.2920

* C113: -.1982 -.1074 -.1034 -.1004 -.2920 -.2920

* C114: -.1967 -.1054 -.1014 -.0984 -.2920 -.2920

* C115: -.1952 -.1034 -.0994 -.0964 -.2920 -.2920

* C116: -.1937 -.1014 -.0974 -.0944 -.2920 -.2920

* C117: -.1922 -.0994 -.0954 -.0924 -.2920 -.2920

* C118: -.1907 -.0974 -.0934 -.0904 -.2920 -.2920

* C119: -.1892 -.0954 -.0914 -.0884 -.2920 -.2920

* C120: -.1877 -.0934 -.0894 -.0864 -.2920 -.2920

* C121: -.1862 -.0914 -.0874 -.0844 -.2920 -.2920

* C122: -.1847 -.0894 -.0854 -.0824 -.2920 -.2920

* C123: -.1832 -.0874 -.0834 -.0804 -.2920 -.2920

* C124: -.1817 -.0854 -.0814 -.0784 -.2920 -.2920

* C125: -.1802 -.0834 -.0794 -.0764 -.2920 -.2920

* C126: -.1787 -.0814 -.0774 -.0744 -.2920 -.2920

* C127: -.1772 -.0794 -.0754 -.0724 -.2920 -.2920

* C128: -.1757 -.0774 -.0734 -.0704 -.2920 -.2920

* C129: -.1742 -.0754 -.0714 -.0684 -.2920 -.2920

* C130: -.1727 -.0734 -.0694 -.0664 -.2920 -.2920

* C131: -.1712 -.0714 -.0674 -.0644 -.2920 -.2920

* C132: -.1697 -.0694 -.0654 -.0624 -.2920 -.2920

* C133: -.1682 -.0674 -.0634 -.0604 -.2920 -.2920

* C134: -.1667 -.0654 -.0614 -.0584 -.2920 -.2920

* C135: -.1652 -.0634 -.0594 -.0564 -.2920 -.2920

* C136: -.1637 -.0614 -.0574 -.0544 -.2920 -.2920

* C137: -.1622 -.0594 -.0554 -.0524 -.2920 -.2920

* C138: -.1607 -.0574 -.0534 -.0504 -.2920 -.2920

* C139: -.1592 -.0554 -.0514 -.0484 -.2920 -.2920

* C140: -.1577 -.0534 -.0494 -.0464 -.2920 -.2920

* C141: -.1562 -.0514 -.0474 -.0444 -.2920 -.2920

* C142: -.1547 -.0494 -.0454 -.0424 -.2920 -.2920

* C143: -.1532 -.0474 -.0434 -.0404 -.2920 -.2920

* C144: -.1517 -.0454 -.0414 -.0384 -.2920 -.2920

* C145: -.1502 -.0434 -.0394 -.0364 -.2920 -.2920

* C146: -.1487 -.0414 -.0374 -.0344 -.2920 -.2920

* C147: -.1472 -.0394 -.0354 -.0324 -.2920 -.2920

* C148: -.1457 -.0374 -.0334 -.0304 -.2920 -.2920

* C149: -.1442 -.0354 -.0314 -.0284 -.2920 -.2920

* C150: -.1427 -.0334 -.0294 -.0264 -.2920 -.2920

* C151: -.1412 -.0314 -.0274 -.0244 -.2920 -.2920

* C152: -.1397 -.0294 -.0254 -.0224 -.2920 -.2920

* C153: -.1382 -.0274 -.0234 -.0204 -.2920 -.2920

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EQUILIBRIUM PRESSURE DATA - CAIIB (AMES 11-073-1)

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TABULATED PRESSURE DATA - CA148 (AMES 11-073-1)

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ALPHA (3) = 3.905 BETA (2) = .182 MACH = 1.2475 Q = 600.37 P = 551.11 RN/L = 3.0117

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7320

X/CY .709 -.2999 -.3877 -.4018 -.4336 -.4189 -.4151

.757 -.2355 -.3531 -.4035 -.4298 -.0000 -.4082

.805 -.3549 -.3919 -.4071 -.4289 -.4203 -.4035

.837 -.3720 -.4022 -.4151 -.4336 -.4227 -.4078

.868 -.3787 -.4133 -.4744 -.4905 -.4573 -.4653

ALPHA (3) = 3.915 BETA (3) = 4.245 MACH = 1.2475 Q = 600.37 P = 551.11 RN/L = 3.0117

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .709 -.3053 -.4050 -.4205 -.4124 -.4584 -.4583

.757 -.3449 -.4064 -.4203 -.4134 -.0000 -.374

.805 -.3643 -.4103 -.4201 -.4151 -.1123 -.375

.837 -.3883 -.4117 -.4176 -.4163 -.1111 -.375

.868 -.4064 -.4155 -.4355 -.4512 -.1138 -.403

ALPHA (4) = 7.877 BETA (4) = -3.687 MACH = 1.2474 C = 500.25 P = 551.11 RN/L = 3.0132

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7320

X/CY .709 -.3153 -.3944 -.3979 -.4762 -.4645 -.4603

.757 -.3508 -.3932 -.4017 -.4648 -.0000 -.4475

.805 -.3680 -.3942 -.4076 -.4617 -.4631 -.4415

.837 -.3865 -.4056 -.4183 -.4627 -.4624 -.4474

.868 -.4030 -.4191 -.4372 -.4750 -.4793 -.4903

ALPHA (4) = 7.882 BETA (2) = .178 MACH = 1.2474 C = 600.25 P = 551.11 RN/L = 3.0132

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .709 -.3099 -.4077 -.4231 -.4520 -.4427 -.4394

.757 -.3510 -.4231 -.4250 -.4484 -.0000 -.4328

.805 -.3722 -.4115 -.4269 -.4482 -.4444 -.4233

.837 -.3930 -.4174 -.4321 -.4527 -.4538 -.4323

.868 -.3920 -.4110 -.4569 -.4661 -.4759 -.4853

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -14CA/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SFCF =	2690.0000 SQ.FT.	XMRP =	.776.6800 IN. X0
L-CDF =	.474.8000 IN.	YMRP =	.0000 IN. Y0
R-CDF =	.956.0500 IN.	ZMRP =	.375.0000 IN. Z0
SGELE =	.0300		

$$\Delta\text{LIFT} (1) = -3.368 \quad \text{BETA} (1) = -3.842 \quad \text{MACH} = 1.0978 \quad Q = 600.10 \quad P = 711.43 \quad RN/L = 3.1681$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z/BV .3170 .4120 .5070 .6020 .6970 .7920$$

X/CY	.3472	-.4504	-.4523	-.5559	-.5609	-.5543
.757	-.3862	-.4430	-.4566	-.5433	.0000	.5431
.815	-.4090	-.4470	-.4632	-.5391	-.5561	-.5358
.877	-.4257	-.4536	-.4756	-.5400	-.5538	-.5404
.938	-.4243	-.4238	-.4493	-.5334	-.5647	-.5956

$$\Delta\text{LIFT} (1) = -3.982 \quad \text{BETA} (2) = .191 \quad \text{MACH} = 1.0978 \quad Q = 600.10 \quad P = 711.43 \quad RN/L = 3.1681$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z/BV .3170 .4120 .5070 .6020 .6970 .7920$$

X/CY	.3463	-.4553	-.5007	-.5691	-.5541	-.5508
.757	-.3987	-.4552	-.5026	-.5596	-.6003	-.5423
.825	-.4176	-.4827	-.5369	-.5565	-.5553	-.5326
.887	-.4112	-.4855	-.5161	-.5629	-.5584	-.5389
.938	-.4340	-.4553	-.5218	-.5224	-.6035	-.5686

$$\Delta\text{LIFT} (1) = -3.987 \quad \text{BETA} (3) = .4.273 \quad \text{MACH} = 1.0978 \quad Q = 600.10 \quad P = 711.43 \quad RN/L = 3.1681$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z/BV .3170 .4120 .5070 .6020 .6970 .7920$$

X/CY	.3537	-.4365	-.5242	-.5501	-.5455	-.5436
.757	-.4572	-.4924	-.5233	-.5451	-.6003	-.5336
.825	-.4347	-.5125	-.5221	-.5425	-.5425	-.5269
.887	-.4571	-.5244	-.5228	-.5466	-.5455	-.5333
.938	-.4514	-.4552	-.4798	-.5342	-.5586	-.5636

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

(XEBK25)

$$\alpha_{c,1} = -3.467 \quad \beta_{c,1} = .056 \quad \beta_{\text{ETA},1} = -3.467 \quad \text{MACH} = 1.0980 \quad 0 = 599.15 \quad P = 710.01 \quad RN/L = 3.1813$$

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{c,2} = -3.460 \quad \beta_{c,2} = .056 \quad \beta_{\text{ETA},2} = -3.460 \quad \text{MACH} = 1.0980 \quad 0 = 599.15 \quad P = 710.01 \quad RN/L = 3.1813$$

X/C:

$$\begin{aligned} -7.98 & -34.60 -4.880 -50.52 -59.45 -58.56 -5823 \\ & -29.21 -4.568 -50.71 -57.92 -50.00 -5723 \\ & -8.35 -4.284 -51.16 -57.40 -58.11 -5652 \\ & -3.37 -4.257 -51.60 -58.47 -57.69 -5573 \\ & -3.38 -4.258 -4.260 -4.535 -51.97 -5597 -5682 \end{aligned}$$

X/C:

$$\begin{aligned} -7.98 & -34.26 -4.880 -52.40 -59.13 -57.92 -5761 \\ & -29.47 -4.225 -52.74 -57.59 -58.11 -5668 \\ & -8.22 -4.268 -53.12 -57.25 -57.75 -5624 \\ & -3.38 -4.263 -4.753 -55.61 -60.39 -6279 \end{aligned}$$

X/C:

$$\begin{aligned} -7.98 & -34.26 -4.880 -52.40 -59.13 -57.92 -5761 \\ & -29.47 -4.225 -52.74 -57.59 -57.78 -5611 \\ & -8.22 -4.268 -53.12 -57.25 -57.75 -5624 \\ & -3.38 -4.263 -4.753 -55.61 -60.39 -6279 \end{aligned}$$

X/C:

$$\begin{aligned} -7.98 & -34.33 -51.83 -55.64 -57.59 -5747 -5721 \\ & -29.47 -4.321 -52.35 -57.50 -50.00 -5685 \\ & -8.22 -4.323 -52.35 -55.97 -57.21 -5640 \\ & -3.38 -4.323 -52.35 -56.16 -57.16 -5576 \\ & -3.38 -4.323 -52.35 -52.45 -55.33 -5923 \end{aligned}$$

X/C:

$$\alpha_{c,3} = -3.468 \quad \beta_{c,3} = -3.468 \quad \beta_{\text{ETA},3} = -3.468 \quad \text{MACH} = 1.0978 \quad 0 = 599.15 \quad P = 710.01 \quad RN/L = 3.1840$$

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{c,4} = -3.470 \quad \beta_{c,4} = -3.470 \quad \beta_{\text{ETA},4} = -3.470 \quad \text{MACH} = 1.0980 \quad 0 = 599.15 \quad P = 710.48 \quad RN/L = 3.1840$$

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{c,5} = -3.470 \quad \beta_{c,5} = -3.470 \quad \beta_{\text{ETA},5} = -3.470 \quad \text{MACH} = 1.0978 \quad 0 = 599.38 \quad P = 710.01 \quad RN/L = 3.1840$$

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XEBK25)

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BY .3170 .4120 .5070 .6020 .6970 .7920

X CY .708 -.3444 -.5090 -.5482 -.6112 -.5993 -.5982

.757 -.2959 -.5106 -.5475 -.6001 -.0000 -.5901

.835 -.4317 -.5161 -.5492 -.5936 -.5967 -.5839

.887 -.4525 -.5157 -.5504 -.5839 -.5935 -.5938

.963 -.4508 -.4428 -.4691 -.5347 -.5903 -.6257

ALPHA (3) = 3.950 BETA (3) = 4.239 MACH = 1.0978

0 = 599.38 P = 710.48 RN/L = 3.1840

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BY .3170 .4120 .5070 .6020 .6970 .7920

X CY .7530 -.5353 -.5774 -.5743 -.5327 -.5946 -.5948

.807 -.4046 -.5253 -.5748 -.5896 -.5924 -.5925

.826 -.4457 -.5427 -.5724 -.5896 -.5924 -.5862

.887 -.4797 -.5425 -.5639 -.5798 -.5881 -.5816

.963 -.4651 -.4797 -.4967 -.5279 -.5672 -.5925

ALPHA (4) = 7.932 BETA (4) = -3.857 MACH = 1.0936

0 = 599.84 P = 710.01 RN/L = 3.1812

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BY .3170 .4120 .5070 .6020 .6970 .7920

X CY .7543 -.5222 -.5498 -.6482 -.6382 -.6363

.757 -.4459 -.5220 -.5512 -.5325 -.0000 -.6201

.835 -.4441 -.5245 -.5538 -.6242 -.6330 -.6090

.887 -.4777 -.5231 -.5631 -.5135 -.5232 -.5980

.963 -.4799 -.5236 -.5613 -.5117 -.5833 -.5606

ALPHA (4) = 7.939 BETA (4) = -185 MACH = 1.0986

0 = 599.84 P = 710.01 RN/L = 3.1812

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BY .3170 .4120 .5070 .6020 .6970 .7920

X CY .7512 -.5277 -.5705 -.5341 -.6248 -.6210

.767 -.4548 -.5272 -.6632 -.6234 -.0000 -.6129

.835 -.4727 -.5253 -.6517 -.6153 -.6164 -.6073

.887 -.4772 -.5238 -.5775 -.5308 -.5128 -.6086

.963 -.4632 -.5233 -.4711 -.5237 -.5791 -.6332

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XEBK25)

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$\alpha_{ref} = -.937$ $\beta_{ref} = 3$ = 4.238 MACH = 1.0986 Q = 599.84 P = 710.01 RN/L = 3.1812

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/34 .3170 .4120 .5070 .6020 .6970 .7920

X/C₁ -.3590 -.5523 -.5984 -.6108 -.6079 -.6084

.167 -.192 -.5513 -.5260 -.6053 .0000 -.5994

.165 -.5533 -.5578 -.5922 -.5022 -.5998 -.5927

.161 -.5539 -.5587 -.5646 -.5937 -.5951 -.5897

.163 -.5572 -.4618 -.5067 -.5310 -.5626 -.5606

$\alpha_{ref} = 11.970$ $\beta_{ref} = 1$ = -3.845 MACH = 1.0981 Q = 599.46 P = 710.25 RN/L = 3.1817

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/34 .3170 .4120 .5070 .6020 .6970 .7920

X/C₁ -.3736 -.5392 -.5627 -.6657 -.5571 -.6514

.161 -.4278 -.5355 -.5955 -.6490 .0000 -.6336

.161 -.4641 -.5117 -.5693 -.6421 -.6493 -.6214

.161 -.5235 -.5265 -.5777 -.6317 -.6397 -.6207

.161 -.4855 -.4663 -.5133 -.5560 -.5974 -.5578

$\alpha_{ref} = 11.981$ $\beta_{ref} = 2$ = 1.87 MACH = 1.0981 Q = 599.46 P = 710.25 RN/L = 3.1817

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/34 .3170 .4120 .5070 .6020 .6970 .7920

X/C₁ -.3621 -.5441 -.5879 -.6353 -.6367 -.6377

.167 -.4172 -.5149 -.5553 -.6268 .0000 -.6280

.165 -.4532 -.5513 -.5955 -.6206 -.5294 -.6208

.161 -.4227 -.5526 -.5643 -.6078 -.6216 -.5196

.161 -.4883 -.5771 -.5726 -.5234 -.5784 -.5334

$\alpha_{ref} = 11.375$ $\beta_{ref} = 3$ = 4.250 MACH = 1.0981 Q = 599.46 P = 710.25 RN/L = 3.1817

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/34 .3170 .4120 .5070 .6020 .5970 .7920

X/C₁ -.3817 -.5533 -.6224 -.6083 -.6162 -.6195

.167 -.4372 -.5653 -.6162 -.6093 .0000 -.6162

.161 -.5760 -.5577 -.6134 -.6102 -.6153 -.6143

.161 -.5126 -.5591 -.5376 -.6074 -.6110 -.6119

.161 -.5287 -.5663 -.5322 -.5322 -.5783 -.5797

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -14CA/B/C/R ORB SPEED BRAKE

(XESK26) (13 AUG 75)

REFERENCE DATA

	X _{REF}	Y _{REF}	Z _{REF}	SQ.FT.	X _{REFP}	Y _{REFP}	Z _{REFP}	ANGLE (1) = -3.955	BETA (1) = -3.845	MACH = .89940	P = 599.79	RN/L = 3.5659	PARAMETRIC DATA
SECTION : 1 : RIGHT HAND SIDE	.3170	.4120	.5070	.6020	.6970	.7920							RUDDER = .000 BDFLAP = .000 R-ELVN = .000 L-ELVN = .900
Z/BV													
A/C:													
-1.308	-1.3053	-1.6185	-1.6951	-1.6732	-1.6732	-1.6118	-1.6010	-1.4591					
-1.307	-1.3048	-1.6137	-1.6732	-1.6732	-1.6732	-1.6399	-1.5225	-1.4434					
-1.306	-1.3043	-1.6151	-1.6663	-1.6663	-1.6663	-1.6027	-1.5070	-1.4352					
-1.305	-1.3039	-1.5720	-1.604	-1.604	-1.604	-1.4296	-1.4296	-1.4401					
-1.304	-1.3034	-1.3048	-1.2284	-1.2284	-1.2284	-1.2284	-1.2284	-1.3356					
A-B-C : 1 : 1 = -3.377	BETA (2) = .190	MACH = .89940	P = 599.79	RN/L = 3.5659									
SECTION : 1 : RIGHT HAND SIDE													
Z/BV													
A/C:													
-1.293	-1.2972	-1.6173	-1.7155	-1.8390	-1.8390	-1.7315	-1.6317						
-1.292	-1.2945	-1.5226	-1.7440	-1.8394	-1.8394	-1.6030	-1.6030						
-1.291	-1.2953	-1.6553	-1.7021	-1.7826	-1.7826	-1.6936	-1.5921						
-1.290	-1.2962	-1.6251	-1.7911	-1.7911	-1.7911	-1.6609	-1.5722						
-1.289	-1.2937	-1.2173	-1.3355	-1.5519	-1.5519	-1.6104	-1.4842						
A-B-C : 1 : 1 = -3.285	BETA (3) = 4.276	MACH = .89940	P = 599.79	RN/L = 3.5659									
SECTION : 1 : RIGHT HAND SIDE													
Z/BV													
A/C:													
-1.283	-1.2871	-1.5751	-1.6559	-1.8773	-1.8773	-1.8514	-1.7842						
-1.282	-1.2873	-1.6773	-1.6616	-1.8421	-1.8421	-1.8050	-1.6774						
-1.281	-1.2861	-1.5757	-1.6550	-1.8239	-1.8239	-1.7951	-1.6430						
-1.280	-1.2871	-1.5813	-1.6897	-1.8113	-1.8113	-1.7586	-1.6095						
-1.279	-1.2835	-1.2142	-1.2630	-1.6295	-1.6295	-1.6857	-1.4919						

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R SPEED BRAKE

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(XEBK26)

$\alpha_{crit} = 3.935$ $\beta_{crit} = 2 = .126$ MACH = .89787 Q = .598.42 P = 1060.5 RNL = 3.5652
 SECTION: 1 RIGHT HAND INSIDE DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XEBK27) (13 AUG 75)

REFERENCE DATA

	X	C₁	C₂	C₃	C₄	C₅	C₆	C₇	C₈	C₉	C₁₀	C₁₁	C₁₂	C₁₃	C₁₄	C₁₅	C₁₆	C₁₇	C₁₈	C₁₉	C₂₀	C₂₁	C₂₂	C₂₃	C₂₄	C₂₅	C₂₆	C₂₇	C₂₈	C₂₉	C₃₀	C₃₁	C₃₂	C₃₃	C₃₄	C₃₅	C₃₆	C₃₇	C₃₈	C₃₉	C₄₀	C₄₁	C₄₂	C₄₃	C₄₄	C₄₅	C₄₆	C₄₇	C₄₈	C₄₉	C₅₀	C₅₁	C₅₂	C₅₃	C₅₄	C₅₅	C₅₆	C₅₇	C₅₈	C₅₉	C₆₀	C₆₁	C₆₂	C₆₃	C₆₄	C₆₅	C₆₆	C₆₇	C₆₈	C₆₉	C₇₀	C₇₁	C₇₂	C₇₃	C₇₄	C₇₅	C₇₆	C₇₇	C₇₈	C₇₉	C₈₀	C₈₁	C₈₂	C₈₃	C₈₄	C₈₅	C₈₆	C₈₇	C₈₈	C₈₉	C₉₀	C₉₁	C₉₂	C₉₃	C₉₄	C₉₅	C₉₆	C₉₇	C₉₈	C₉₉	C₁₀₀	C₁₀₁	C₁₀₂	C₁₀₃	C₁₀₄	C₁₀₅	C₁₀₆	C₁₀₇	C₁₀₈	C₁₀₉	C₁₁₀	C₁₁₁	C₁₁₂	C₁₁₃	C₁₁₄	C₁₁₅	C₁₁₆	C₁₁₇	C₁₁₈	C₁₁₉	C₁₂₀	C₁₂₁	C₁₂₂	C₁₂₃	C₁₂₄	C₁₂₅	C₁₂₆	C₁₂₇	C₁₂₈	C₁₂₉	C₁₃₀	C₁₃₁	C₁₃₂	C₁₃₃	C₁₃₄	C₁₃₅	C₁₃₆	C₁₃₇	C₁₃₈	C₁₃₉	C₁₄₀	C₁₄₁	C₁₄₂	C₁₄₃	C₁₄₄	C₁₄₅	C₁₄₆	C₁₄₇	C₁₄₈	C₁₄₉	C₁₅₀	C₁₅₁	C₁₅₂	C₁₅₃	C₁₅₄	C₁₅₅	C₁₅₆	C₁₅₇	C₁₅₈	C₁₅₉	C₁₆₀	C₁₆₁	C₁₆₂	C₁₆₃	C₁₆₄	C₁₆₅	C₁₆₆	C₁₆₇	C₁₆₈	C₁₆₉	C₁₇₀	C₁₇₁	C₁₇₂	C₁₇₃	C₁₇₄	C₁₇₅	C₁₇₆	C₁₇₇	C₁₇₈	C₁₇₉	C₁₈₀	C₁₈₁	C₁₈₂	C₁₈₃	C₁₈₄	C₁₈₅	C₁₈₆	C₁₈₇	C₁₈₈	C₁₈₉	C₁₉₀	C₁₉₁	C₁₉₂	C₁₉₃	C₁₉₄	C₁₉₅	C₁₉₆	C₁₉₇	C₁₉₈	C₁₉₉	C₂₀₀	C₂₀₁	C₂₀₂	C₂₀₃	C₂₀₄	C₂₀₅	C₂₀₆	C₂₀₇	C₂₀₈	C₂₀₉	C₂₁₀	C₂₁₁	C₂₁₂	C₂₁₃	C₂₁₄	C₂₁₅	C₂₁₆	C₂₁₇	C₂₁₈	C₂₁₉	C₂₂₀	C₂₂₁	C₂₂₂	C₂₂₃	C₂₂₄	C₂₂₅	C₂₂₆	C₂₂₇	C₂₂₈	C₂₂₉	C₂₃₀	C₂₃₁	C₂₃₂	C₂₃₃	C₂₃₄	C₂₃₅	C₂₃₆	C₂₃₇	C₂₃₈	C₂₃₉	C₂₄₀	C₂₄₁	C₂₄₂	C₂₄₃	C₂₄₄	C₂₄₅	C₂₄₆	C₂₄₇	C₂₄₈	C₂₄₉	C₂₅₀	C₂₅₁	C₂₅₂	C₂₅₃	C₂₅₄	C₂₅₅	C₂₅₆	C₂₅₇	C₂₅₈	C₂₅₉	C₂₆₀	C₂₆₁	C₂₆₂	C₂₆₃	C₂₆₄	C₂₆₅	C₂₆₆	C₂₆₇	C₂₆₈	C₂₆₉	C₂₇₀	C₂₇₁	C₂₇₂	C₂₇₃	C₂₇₄	C₂₇₅	C₂₇₆	C₂₇₇	C₂₇₈	C₂₇₉	C₂₈₀	C₂₈₁	C₂₈₂	C₂₈₃	C₂₈₄	C₂₈₅	C₂₈₆	C₂₈₇	C₂₈₈	C₂₈₉	C₂₉₀	C₂₉₁	C₂₉₂	C₂₉₃	C₂₉₄	C₂₉₅	C₂₉₆	C₂₉₇	C₂₉₈	C₂₉₉	C₃₀₀	C₃₀₁	C₃₀₂	C₃₀₃	C₃₀₄	C₃₀₅	C₃₀₆	C₃₀₇	C₃₀₈	C₃₀₉	C₃₁₀	C₃₁₁	C₃₁₂	C₃₁₃	C₃₁₄	C₃₁₅	C₃₁₆	C₃₁₇	C₃₁₈	C₃₁₉	C₃₂₀	C₃₂₁	C₃₂₂	C₃₂₃	C₃₂₄	C₃₂₅	C₃₂₆	C₃₂₇	C₃₂₈	C₃₂₉	C₃₃₀	C₃₃₁	C₃₃₂	C₃₃₃	C₃₃₄	C₃₃₅	C₃₃₆	C₃₃₇	C₃₃₈	C₃₃₉	C₃₄₀	C₃₄₁	C₃₄₂	C₃₄₃	C₃₄₄	C₃₄₅	C₃₄₆	C₃₄₇	C₃₄₈	C₃₄₉	C₃₅₀	C₃₅₁	C₃₅₂	C₃₅₃	C₃₅₄	C₃₅₅	C₃₅₆	C₃₅₇	C₃₅₈	C₃₅₉	C₃₆₀	C₃₆₁	C₃₆₂	C₃₆₃	C₃₆₄	C₃₆₅	C₃₆₆	C₃₆₇	C₃₆₈	C₃₆₉	C₃₇₀	C₃₇₁	C₃₇₂	C₃₇₃	C₃₇₄	C₃₇₅	C₃₇₆	C₃₇₇	C₃₇₈	C₃₇₉	C₃₈₀	C₃₈₁	C₃₈₂	C₃₈₃	C₃₈₄	C₃₈₅	C₃₈₆	C₃₈₇	C₃₈₈	C₃₈₉	C₃₉₀	C₃₉₁	C₃₉₂	C₃₉₃	C₃₉₄	C₃₉₅	C₃₉₆	C₃₉₇	C₃₉₈	C₃₉₉	C₄₀₀	C₄₀₁	C₄₀₂	C₄₀₃	C₄₀₄	C₄₀₅	C₄₀₆	C₄₀₇	C₄₀₈	C₄₀₉	C₄₁₀	C₄₁₁	C₄₁₂	C₄₁₃	C₄₁₄	C₄₁₅	C₄₁₆	C₄₁₇	C₄₁₈	C₄₁₉	C₄₂₀	C₄₂₁	C₄₂₂	C₄₂₃	C₄₂₄	C₄₂₅	C₄₂₆	C₄₂₇	C₄₂₈	C₄₂₉	C₄₃₀	C₄₃₁	C₄₃₂	C₄₃₃	C₄₃₄	C₄₃₅	C₄₃₆	C₄₃₇	C₄₃₈	C₄₃₉	C₄₄₀	C₄₄₁	C₄₄₂	C₄₄₃	C₄₄₄	C₄₄₅	C₄₄₆	C₄₄₇	C₄₄₈	C₄₄₉	C₄₅₀	C₄₅₁	C₄₅₂	C₄₅₃	C₄₅₄	C₄₅₅	C₄₅₆	C₄₅₇	C₄₅₈	C₄₅₉	C₄₆₀	C₄₆₁	C₄₆₂	C₄₆₃	C₄₆₄	C₄₆₅	C₄₆₆	C₄₆₇	C₄₆₈	C₄₆₉	C₄₇₀	C₄₇₁	C₄₇₂	C₄₇₃	C₄₇₄	C₄₇₅	C₄₇₆	C₄₇₇	C₄₇₈	C₄₇₉	C₄₈₀	C₄₈₁	C₄₈₂	C₄₈₃	C₄₈₄	C₄₈₅	C₄₈₆	C₄₈₇	C₄₈₈	C₄₈₉	C₄₉₀	C₄₉₁	C₄₉₂	C₄₉₃	C₄₉₄	C₄₉₅	C₄₉₆	C₄₉₇	C₄₉₈	C₄₉₉	C₅₀₀	C₅₀₁	C₅₀₂	C₅₀₃	C₅₀₄	C₅₀₅	C₅₀₆	C₅₀₇	C₅₀₈	C₅₀₉	C₅₁₀	C₅₁₁	C₅₁₂	C₅₁₃	C₅₁₄	C₅₁₅	C₅₁₆	C₅₁₇	C₅₁₈	C₅₁₉	C₅₂₀	C₅₂₁	C₅₂₂	C₅₂₃	C₅₂₄	C₅₂₅	C₅₂₆	C₅₂₇	C₅₂₈	C₅₂₉	C₅₃₀	C₅₃₁	C₅₃₂	C₅₃₃	C₅₃₄	C₅₃₅	C₅₃₆	C₅₃₇	C₅₃₈	C₅₃₉	C₅₄₀	C₅₄₁	C₅₄₂	C₅₄₃	C₅₄₄	C₅₄₅	C₅₄₆	C₅₄₇	C₅₄₈	C₅₄₉	C₅₅₀	C₅₅₁	C₅₅₂	C₅₅₃	C₅₅₄	C₅₅₅	C₅₅₆	C₅₅₇	C₅₅₈	C₅₅₉	C₅₆₀	C₅₆₁	C₅₆₂	C₅₆₃	C₅₆₄	C₅₆₅	C₅₆₆	C₅₆₇	C₅₆₈	C₅₆₉	C₅₇₀	C₅₇₁	C₅₇₂	C₅₇₃	C₅₇₄	C₅₇₅	C₅₇₆	C₅₇₇	C₅₇₈	C₅₇₉	C₅₈₀	C₅₈₁	C₅₈₂	C₅₈₃	C₅₈₄	C₅₈₅	C₅₈₆	C₅₈₇	C₅₈₈	C₅₈₉	C₅₉₀	C₅₉₁	C₅₉₂	C₅₉₃	C₅₉₄	C₅₉₅	C₅₉₆	C₅₉₇	C₅₉₈	C₅₉₉	C₆₀₀	C₆₀₁	C₆₀₂	C₆₀₃	C₆₀₄	C₆₀₅	C₆₀₆	C₆₀₇	C₆₀₈	C₆₀₉	C₆₁₀	C₆₁₁	C₆₁₂	C₆₁₃	C₆₁₄	C₆₁₅	C₆₁₆	C₆₁₇	C₆₁₈	C₆₁₉	C₆₂₀	C₆₂₁	C₆₂₂	C₆₂₃	C₆₂₄	C₆₂₅	C₆₂₆	C₆₂₇	C₆₂₈	C₆₂₉	C₆₃₀	C₆₃₁	C₆₃₂	C₆₃₃	C₆₃₄	C₆₃₅	C₆₃₆	C₆₃₇	C₆₃₈	C₆₃₉	C₆₄₀	C₆₄₁	C₆₄₂	C₆₄₃	C₆₄₄	C₆₄₅	C₆₄₆	C₆₄₇	C₆₄₈	C₆₄₉	C₆₅₀	C₆₅₁	C₆₅₂	C₆₅₃	C₆₅₄	C₆₅₅	C₆₅₆	C₆₅₇	C₆₅₈	C₆₅₉	C₆₆₀	C₆₆₁	C₆₆₂	C₆₆₃	C₆₆₄	C₆₆₅	C₆₆₆	C₆₆₇	C₆₆₈	C₆₆₉	C₆₇₀	C₆₇₁	C₆₇₂	C₆₇₃	C₆₇₄	C₆₇₅	C₆₇₆	C₆₇₇	C₆₇₈	C₆₇₉	C₆₈₀	C₆₈₁	C₆₈₂	C₆₈₃	C₆₈₄	C₆₈₅	C₆₈₆	C₆₈₇	C₆₈₈	C₆₈₉	C₆₉₀	C₆₉₁	C₆₉₂	C₆₉₃	C₆₉₄	C₆₉₅	C₆₉₆	C₆₉₇	C₆₉₈	C₆₉₉	C₇₀₀	C₇₀₁	C₇₀₂	C₇₀₃	C₇₀₄	C₇₀₅	C₇₀₆	C₇₀₇	C₇₀₈	C₇₀₉	C₇₁₀	C₇₁₁	C₇₁₂	C₇₁₃	C₇₁₄	C₇₁₅	C₇₁₆	C₇₁₇	C₇₁₈	C₇₁₉	C₇₂₀	C₇₂₁	C₇₂₂	C₇₂₃	C₇₂₄	C₇₂₅	C₇₂₆	C₇₂₇	C₇₂₈	C₇₂₉	C₇₃₀	C₇₃₁	C₇₃₂	C₇₃₃	C₇₃₄	C₇₃₅	C₇₃₆	C₇₃₇	C₇₃₈	C₇₃₉	C₇₄₀	C₇₄₁	C₇₄₂	C₇₄₃	C₇₄₄	C₇₄₅	C₇₄₆	C₇₄₇	C₇₄₈	C₇₄₉	C₇₅₀	C₇₅₁	C₇₅₂	C₇₅₃	C₇₅₄	C₇₅₅	C₇₅₆	C₇₅₇	C₇₅₈	C₇₅₉	C₇₆₀	C₇₆₁	C₇₆₂	C₇₆₃	C₇₆₄	C₇₆₅	C₇₆₆	C₇₆₇	C₇₆₈	C₇₆₉	C₇₇₀	C₇₇₁	C₇₇₂	C₇₇₃	C₇₇₄	C₇₇₅	C₇₇₆	C₇₇₇	C₇₇₈	C₇₇₉	C₇₈₀	C₇₈₁	C₇₈₂	C₇₈₃	C₇₈₄	C₇₈₅	C₇₈₆	C₇₈₇	C₇₈₈	C₇₈₉	C₇₉₀	C₇₉₁	C₇₉₂	C₇₉₃	C₇₉₄	C₇₉₅	C₇₉₆	C₇₉₇	C₇₉₈	C₇₉₉	C₈₀₀	C₈₀₁	C₈₀₂	C₈₀₃	C₈₀₄	C₈₀₅	C₈₀₆	C₈₀₇	C₈₀₈	C₈₀₉	C₈₁₀	C₈₁₁	C₈₁₂

11-0731

11-0731-001 DENSURE DATA - DA148 (AMES 11-073-1)

PAGE 52-3

AMES 11-0731DA1481 - 140A/B/C/R DBA SPEED BRAKE

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MACH = .3-.553 MACH = .55658 0 = .593.49 P = 2386.0 FNL = 4.842
DEPENDENT VARIABLE CP
MACH = .6020 .6970 .7920

MACH = .3145 -.3721 -.3293 -.3432
0 = .3157 -.3535 -.3138
CP = .3156 -.3135 -.3255
MACH = .3155 -.3233 -.3054
0 = .3154 -.3212 -.3011
CP = .3153 -.3213 -.2973
MACH = .3152 -.3215 -.2135
0 = .3151 -.3217 -.2135
CP = .3150 -.3218 -.2135

MACH = .3149 -.3720 -.3292 -.3432
0 = .3148 -.3534 -.3138
CP = .3147 -.3135 -.3255
MACH = .3146 -.3233 -.3054
0 = .3145 -.3212 -.3011
CP = .3144 -.3213 -.2973
MACH = .3143 -.3215 -.2135
0 = .3142 -.3217 -.2135
CP = .3141 -.3218 -.2135

MACH = .3141 -.3720 -.3292 -.3432
0 = .3140 -.3534 -.3138
CP = .3139 -.3135 -.3255
MACH = .3138 -.3233 -.3054
0 = .3137 -.3212 -.3011
CP = .3136 -.3213 -.2973
MACH = .3135 -.3215 -.2135
0 = .3134 -.3217 -.2135
CP = .3133 -.3218 -.2135

MACH = .3133 -.3720 -.3292 -.3432
0 = .3132 -.3534 -.3138
CP = .3131 -.3135 -.3255
MACH = .3130 -.3233 -.3054
0 = .3129 -.3212 -.3011
CP = .3128 -.3213 -.2973
MACH = .3125 -.3215 -.2135
0 = .3124 -.3217 -.2135
CP = .3123 -.3218 -.2135

MACH = .3123 -.3720 -.3292 -.3432
0 = .3122 -.3534 -.3138
CP = .3121 -.3135 -.3255
MACH = .3120 -.3233 -.3054
0 = .3119 -.3212 -.3011
CP = .3118 -.3213 -.2973
MACH = .3115 -.3215 -.2135
0 = .3114 -.3217 -.2135
CP = .3113 -.3218 -.2135

MACH = .3113 -.3720 -.3292 -.3432
0 = .3112 -.3534 -.3138
CP = .3111 -.3135 -.3255
MACH = .3110 -.3233 -.3054
0 = .3109 -.3212 -.3011
CP = .3108 -.3213 -.2973
MACH = .3105 -.3215 -.2135
0 = .3104 -.3217 -.2135
CP = .3103 -.3218 -.2135

MACH = .3103 -.3720 -.3292 -.3432
0 = .3102 -.3534 -.3138
CP = .3101 -.3135 -.3255
MACH = .3100 -.3233 -.3054
0 = .3099 -.3212 -.3011
CP = .3098 -.3213 -.2973
MACH = .3095 -.3215 -.2135
0 = .3094 -.3217 -.2135
CP = .3093 -.3218 -.2135

MACH = .3093 -.3720 -.3292 -.3432
0 = .3092 -.3534 -.3138
CP = .3091 -.3135 -.3255
MACH = .3089 -.3233 -.3054
0 = .3088 -.3212 -.3011
CP = .3087 -.3213 -.2973
MACH = .3085 -.3215 -.2135
0 = .3084 -.3217 -.2135
CP = .3083 -.3218 -.2135

CASE #: FFD 76

TABULATED PRESSURE DI

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AMES 11-n.

10A/B/C/R ORB SPEED BRAKE

(XEBK27)

ALPHA = 7.936 BETA (1) = -7.825 DEP_z CP = 593.13 P = 2386.0 RN/L = 4.8429

SECTION : 1;RIGHT HAND INSIDE

CP

Z/BV .3170 .4120 .5070 .6020 .6

Y/CV .768 -.1929 -.2438 -.2362 -.2496 -.251 -.2472

.757 -.2058 -.2392 -.2367 -.2357 -.0303 -.8379

.605 -.2209 -.2403 -.2367 -.2372 -.2511 -.2352

.997 -.2225 -.2351 -.2302 -.2357 -.2441 -.2339

.662 -.2280 -.1951 -.1489 -.1655 -.2057 -.1804

ALPHA = 7.944 BETA (2) = -3.857 MACH = .59590

P = 593.13

RN/L = 4.8429

SECTION : 1;RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

Y/CV .768 -.2052 -.2329 -.3044 -.3686 -.3097 -.3249

.757 -.2309 -.2829 -.3051 -.3519 -.0000 -.2908

.605 -.2471 -.3275 -.3223 -.3379 -.3022 -.2805

.987 -.2561 -.2772 -.2995 -.3179 -.3036 -.2708

.663 -.2357 -.1930 -.1501 -.2156 -.2691 -.1892

ALPHA = 9.045 BETA (3) = .182 MACH = .59590

P = 593.13

RN/L = 4.8429

SECTION : 1;RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

Y/CV .768 -.2173 -.3117 -.3549 -.3351 -.3096 -.3217

.757 -.215 -.319 -.3449 -.3280 -.0000 -.3048

.605 -.2613 -.3207 -.346 -.3248 -.3007 -.2912

.987 -.2721 -.3110 -.3234 -.3151 -.3007 -.2816

.663 -.2313 -.1734 -.1555 -.2205 -.2795 -.2050

ALPHA = 9.045 BETA (4) = .4.239 MACH = .59590

P = 593.13

RN/L = 4.8429

SECTION : 1;RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .5970 .7920

Y/CV .768 -.2052 -.2369 -.3431 -.2744 -.2459 -.2587

.757 -.2323 -.2976 -.3219 -.2684 -.0000 -.2472

.605 -.2651 -.3263 -.3152 -.2653 -.2558 -.2384

.987 -.2636 -.3041 -.3259 -.2510 -.2429 -.2299

.663 -.2431 -.1922 -.1436 -.1629 -.2171 -.1589

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REGULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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ALPHA = 8.04 : BETA (5) = 8.297 MACH = .59590 0 = 592.13 P = 2386.0 RNL = 4.8429

AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

(XEBK27)

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/ CV .708 -.1993 -.2421 -.2610 -.2241 -.2080 -.2189

.757 -.2095 -.2343 -.2595 -.2139 .0000 -.2118

.805 -.2218 -.2480 -.2448 -.2058 -.2156 -.2163

.857 -.2279 -.2435 -.2365 -.2061 -.2056 -.2059

.909 -.2286 -.2048 -.1654 -.1600 -.1909 -.1643

ALPHA : B1 = 11.929 BETA (1) = -7.850 MACH = .59646 0 = 594.33 P = 2386.5 RNL = 4.8458

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/ CV .708 -.1877 -.2233 -.2245 -.2436 -.2525 -.2704

.757 -.2017 -.2257 -.2250 -.2334 .0000 -.2625

.805 -.2136 -.2274 -.2221 -.2359 -.2508 -.2529

.857 -.2222 -.2224 -.2238 -.2343 -.2601 -.2437

.909 -.2326 -.2253 -.1625 -.1718 -.2097 -.1913

ALPHA : B1 = 11.929 BETA (2) = -3.836 MACH = .59646 0 = 594.33 P = 2386.5 RNL = 4.8458

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/ CV .708 -.2013 -.2718 -.2946 -.3169 -.2872 -.2927

.757 -.2205 -.2719 -.2898 -.3293 .0000 -.2673

.805 -.2375 -.2746 -.2895 -.3221 -.2828 -.2527

.857 -.2459 -.2597 -.2903 -.2989 -.2773 -.2514

.909 -.2289 -.1840 -.1485 -.2039 -.2377 -.1745

ALPHA : B1 = 11.930 BETA (3) = .181 MACH = .59646 0 = 594.33 P = 2386.5 RNL = 4.8458

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/ CV .708 -.2032 -.3029 -.3484 -.3475 -.2675 -.2895

.757 -.2292 -.3095 -.3284 -.3343 .0000 -.2732

.805 -.2534 -.2966 -.3255 -.3175 -.2713 -.2534

.857 -.2533 -.3039 -.3293 -.2945 -.2656 -.2543

.909 -.2225 -.1742 -.1572 -.2030 -.2417 -.1797

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE						
ALPHA = 11.930	BETA (4) = 4.251	MACH = .59646	Q = 594.33	P = 2386.5	RNL = 4.8458	(XE8K27)
SECTION 1: RIGHT HAND INSIDE						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
DEPENDENT VARIABLE CP						
X/CP						
.708	-1.2051	-.2941	-.3344	-.2544	-.2359	-.2444
.757	-.2270	-.2917	-.3263	-.2540	-.0000	-.2326
.805	-.2500	-.2936	-.3111	-.2466	-.2421	-.2309
.897	-.2590	-.2958	-.2946	-.2356	-.2333	-.2309
.958	-.2457	-.2031	-.1521	-.1747	-.2052	-.1682
ALPHA = 11.920	BETA (5) = 8.317	MACH = .59646	Q = 594.33	P = 2386.5	RNL = 4.8458	
SECTION 1: RIGHT HAND INSIDE						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
DEPENDENT VARIABLE CP						
X/CP						
.718	-.1977	-.2340	-.2811	-.1942	-.2021	-.2186
.757	-.2128	-.2230	-.2044	-.1902	.0000	-.2009
.805	-.2112	-.2280	-.2323	-.1659	-.2009	-.2088
.897	-.2192	-.2353	-.2185	-.1854	-.2038	-.2006
.958	-.2344	-.2179	-.1595	-.1571	-.1885	-.1653

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11 073(OA14B) -1404A/B/C/R ORB SPEED BRAKE

(XEBR8) (13 AUG 75)

REFERENCE DATA

REF =	2030.0000 SQ.FT.	XMRP =	1076.6800 IN. X0
LREF =	4.74.8000 IN.	YMRP =	.0000 IN. Y0
BREF =	325.2500 IN.	ZMRP =	375.0000 IN. Z0
SCALE =	.C330		

 $\alpha_{\text{EPA}} (1) = -3.978 \quad \text{BETA} (1) = -3.855 \quad \text{MACH} = 1.3927 \quad Q = 599.58 \quad P = 441.59 \quad RN/L = 2.9214$

SECTION : 1 RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z: 0, .3170 .4120 .5070 .6020 .6970 .7920

X/C:	.708	-.5768	-.5539	-.5571	-.5552	-.5404	-.4919
	.707	-.5626	-.5572	-.5572	-.5562	-.0000	-.4928
	.695	-.5456	-.5650	-.5755	-.5652	.0055	-.4959
	.697	-.5655	-.5727	-.5765	-.5639	.5315	-.4968
	.668	-.5605	-.5743	-.5730	-.5574	.5277	-.5096

 $\alpha_{\text{EPA}} (1) = -3.971 \quad \text{BETA} (2) = .185 \quad \text{MACH} = 1.3927 \quad Q = 599.58 \quad P = 441.59 \quad RN/L = 2.9214$

SECTION : 1 RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z: 0, .3170 .4120 .5070 .6020 .6970 .7920

X/C:	.708	-.5764	-.5500	-.5633	-.5604	-.5453	-.5113
	.707	-.5459	-.5542	-.5568	-.5600	.0000	-.5018
	.695	-.5424	-.5611	-.5692	-.5602	.5001	-.4980
	.697	-.5528	-.5670	-.5685	-.5585	.5361	-.4929
	.668	-.5565	-.5570	-.5640	-.5552	.5316	-.4948

 $\alpha_{\text{EPA}} (1) = -3.978 \quad \text{BETA} (3) = .4270 \quad \text{MACH} = 1.3927 \quad Q = 599.58 \quad P = 441.59 \quad RN/L = 2.9214$

SECTION : 1 RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z: 0, .3170 .4120 .5070 .6020 .6970 .7920

X/C:	.708	-.56236	-.5536	-.5673	-.5550	-.5513	-.5202
	.707	-.54497	-.5675	-.5678	-.5656	.0000	-.5105
	.695	-.5447	-.5627	-.5742	-.5657	.5494	-.5075
	.697	-.5564	-.5723	-.5774	-.5633	.5467	-.5031
	.668	-.5634	-.5723	-.5693	-.5600	.5418	-.4991

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TABULATED PRESSURE DATA - OA148 / AMES 11-073-1

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AMES 11-073(0A148) - 140A/B/C/R 088 SPEED BRAKE

1X8K281

$\text{ALPHA} + 31 = 2.892 \quad \text{BETA} + 21 = .179 \quad \text{MACH} = 1.3920 \quad Q = 599.57 \quad P = 442.06 \quad RN/L = 2.9184$

SECTION 1: RIGHT HAND INSIDE - DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .703 - .5863 -.5624 -.5756 -.5742 -.5617 -.5276

.757 - .5593 -.5660 -.5804 -.5752 .0000 -.5184

.625 - .5555 -.5735 -.5832 -.5747 -.5572 -.5155

.637 - .5643 -.5791 -.5837 -.5723 -.5548 -.5097

.558 - .5688 -.5600 -.5794 -.5597 -.5510 -.5064

ALPHA + 31 = 3.895 BETA + 31 = 4.241 MACH = 1.3920 Q = 599.57 P = 442.05 RN/L = 2.9184

SECTION 1: RIGHT HAND INSIDE - DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .703 - .5356 -.5692 -.5791 -.5791 -.5673 -.5333

.757 - .5554 -.5727 -.5840 -.5822 -.0000 -.5259

.805 - .5623 -.5776 -.5876 -.5795 -.5629 -.5219

.887 - .5699 -.5820 -.5830 -.5781 -.5585 -.5211

.958 - .5718 -.5885 -.5845 -.5733 -.5536 -.5183

ALPHA + 41 = 7.940 BETA + 11 = -3.870 MACH = 1.3916 Q = 599.57 P = 442.30 RN/L = 2.9184

SECTION 1: RIGHT HAND INSIDE - DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .703 - .5930 -.5711 -.5929 -.5853 -.5747 -.5378

.757 - .5629 -.5734 -.5977 -.5870 .0000 -.5300

.815 - .5535 -.5799 -.5919 -.5879 -.5704 -.5276

.867 - .5708 -.5980 -.5932 -.5857 -.5676 -.5237

.938 - .5748 -.5935 -.5926 -.5920 -.5610 -.5227

ALPHA + 41 = 7.946 BETA + 21 = 1.76 MACH = 1.3916 Q = 599.57 P = 442.30 RN/L = 2.9184

SECTION 1: RIGHT HAND INSIDE - DEPENDENT VARIABLE CP

Z/BV .3170 .4122 .5070 .6020 .6970 .7920

X/CY .703 - .5935 -.5732 -.5928 -.5821 -.5722 -.5379

.757 - .5685 -.5735 -.5873 -.5845 .0000 -.5318

.815 - .5633 -.5735 -.5939 -.5843 -.5694 -.5282

.867 - .5720 -.5879 -.5915 -.5826 -.5668 -.5237

.938 - .5751 -.5936 -.5936 -.5791 -.5609 -.5216

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE (XEBK28)							
ALPHA (3) = 7.2+3	BETA (3) = 4.239	MACH = 1.3916	Q = 599.57	P = 442.30	R/N/L = 2.9180		
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/EV .3173 .4120 .5070 .6020 .6970 .7920	X/CV .758 -.5624 -.5829 -.5952 -.5950 -.5732 -.5423						
	.757 -.5789 -.5635 -.5998 -.5964 .0000 -.5363						
	.655 -.5743 -.5625 -.6016 -.5954 -.5747 -.5333						
	.887 -.5825 -.5936 -.6026 -.5952 -.5711 -.5288						
	.562 -.5332 -.5995 -.6032 -.5905 -.5573 -.524						
ALPHA (5) = 11.853 BETA (1) = -3.856 MACH = 1.3913 Q = 599.66 P = 442.53 R/N/L = 2.9180							
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP	Z/EV .3173 .4120 .5070 .6020 .6970 .7920	X/CV .758 -.5624 -.5807 -.5917 -.5957 -.5884 -.5509					
	.757 -.5795 -.5931 -.5959 -.5986 .0000 -.5447						
	.925 -.5759 -.5659 -.6021 -.5998 -.5639 -.5417						
	.867 -.5731 -.5658 -.6021 -.5998 -.5763 -.5389						
	.963 -.5653 -.5633 -.6022 -.5955 -.5752 -.5365						
ALPHA (5) = 11.873 BETA (2) = .179 MACH = 1.3913 Q = 599.66 P = 442.53 R/N/L = 2.9180							
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP	Z/EV .3173 .4120 .5070 .6020 .6970 .7920	X/CV .758 -.5927 -.5791 -.5939 -.5909 -.5834 -.5485					
	.757 -.5763 -.5820 -.5846 -.5924 .0000 -.5426						
	.915 -.5718 -.5812 -.5879 -.5932 -.5779 -.5386						
	.837 -.5731 -.5824 -.5881 -.5920 -.5750 -.5351						
	.932 -.5732 -.5818 -.5838 -.5935 -.5712 -.5328						
ALPHA (5) = 11.853 BETA (3) = 4.255 MACH = 1.3913 Q = 599.66 P = 442.53 R/N/L = 2.9180							
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP	Z/EV .2172 .4120 .5070 .6020 .6970 .7920	X/CV .758 -.5795 -.5831 -.5871 -.5821 -.5823 -.5521					
	.757 -.5833 -.5832 -.5872 -.5855 -.5855 -.5574						
	.915 -.5816 -.5815 -.5875 -.5856 -.5856 -.5541						
	.837 -.5821 -.5816 -.5876 -.5857 -.5857 -.5535						
	.932 -.5820 -.5817 -.5877 -.5858 -.5858 -.5535						

NOTE 1: PREDICTED

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-07310A14B1 - 140A/B/C/R ORB SPEED BRAKE

(XEBK29) (13 AUG 75)

REFERENCE DATA

ZREF = 2530.0000 SQ.FT.	XZP = 1076.6800 IN. X0
ZREF = 1724.8223 IN.	YZP = .0000 IN. Y0
ZREF = 375.0690 IN.	ZNP = 375.0000 IN. Z0
S-C-L-E = .0300	

A_2-A (1) = -3.985 BETA (1) = -3.385 MACH = 1.2451 Q = 599.58 P = 552.51 RNL = 3.0225

SECTION: 1 UP/RIGHT H.A.C/H.INSIDE

DEPENDENT VARIABLE CP

Z 1.0 .3172 .4120 .5070 .6020 .6970 .7920

X/C: .1723 -.6835 -.5811 -.6758 -.6737 -.6567 -.6154

.1657 -.6542 -.5611 -.6638 -.6749 -.6303 -.6079

.1630 -.6514 -.5723 -.6532 -.6758 -.6511 -.6048

.1657 -.6518 -.6339 -.5974 -.6725 -.5463 -.6332

.1638 -.6523 -.5654 -.6555 -.5678 -.6388 -.5980

A_2-A (2) = -3.957 BETA (2) = -1.166 MACH = 1.2451 Q = 599.58 P = 552.51 RNL = 3.0225

SECTION: 1 UP/RIGHT H.A.C/H.INSIDE

DEPENDENT VARIABLE CP

Z 1.0 .3170 .4120 .5070 .6020 .6970 .7920

X/C: .1723 -.6835 -.5811 -.6758 -.6737 -.6567 -.6154

.1657 -.6542 -.5611 -.6638 -.6749 -.6303 -.6079

.1630 -.6514 -.5723 -.6532 -.6758 -.6511 -.6048

.1657 -.6518 -.6339 -.5974 -.6725 -.5463 -.6332

.1638 -.6523 -.5654 -.6555 -.5678 -.6388 -.5980

A_2-A (3) = -3.97- BETA (3) = -4.263 MACH = 1.2451 Q = 599.58 P = 552.51 RNL = 3.0225

SECTION: 1 UP/RIGHT H.A.C/H.INSIDE

DEPENDENT VARIABLE CP

Z 1.0 .3170 .4120 .5070 .6020 .6970 .7920

X/C: .1723 -.6834 -.6717 -.6874 -.5848 -.6716 -.6328

.1657 -.6543 -.5635 -.6847 -.6372 -.6000 -.6250

.1630 -.6514 -.5725 -.6335 -.6974 -.6661 -.6215

.1657 -.6515 -.6323 -.6637 -.6846 -.6628 -.6167

.1638 -.6523 -.5636 -.6538 -.6303 -.6534 -.6122

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE										(XEBK29)	
ALPHA / 2	- .035	BETA / 1	= -3.871	MACH	= 1.2459	Q	= 599.80	P	= 552.04	RNL	= 3.0192
SECTION : 1 RIGHT HAND INSIDE											
Z/BV	.3170	4120	.5070	.6020	.6970	.7920					
X/CA	.7615	-.6681	-.6851	-.6867	-.6693	-.6161					
Z/CA	.757	-.6532	-.6922	-.5903	.3000	-.6085					
X/CA	.805	-.6382	-.6357	-.5917	-.6629	-.6062					
Z/CA	.869	-.6301	-.6297	-.6824	-.6553	-.6034					
X/CA	.767	-.6532	-.5945	-.6981	-.6841	-.6433	-.5995				
Z/CA	.763	-.6532	-.5945	-.6981	-.6841	-.6433	-.5995				
SECTION : 1 LEFT HAND INSIDE											
Z/BV	.3170	4120	.5070	.6020	.6970	.7920					
X/CA	.7666	-.6571	-.6820	-.6830	-.6660	-.6239					
Z/CA	.7519	-.6709	-.6632	-.6845	-.0000	-.6185					
X/CA	.7519	-.6709	-.6632	-.6845	-.6598	-.6157					
Z/CA	.7674	-.6794	-.6931	-.6944	-.6560	-.6144					
X/CA	.8083	-.6882	-.6553	-.6839	-.6560	-.6097					
Z/CA	.8735	-.6532	-.6336	-.6771	-.6564	-.6097					
SECTION : 1 RIGHT HAND INSIDE											
Z/BV	.3170	4120	.5070	.6020	.6970	.7920					
X/CA	.7176	-.6324	-.6937	-.6937	-.5826	-.6453					
Z/CA	.757	-.6892	-.6851	-.7029	-.7001	-.6336					
X/CA	.874	-.6935	-.7067	-.7067	-.6803	-.6372					
Z/CA	.8733	-.7247	-.7247	-.7277	-.6398	-.6748					
X/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6339					
Z/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6293					
SECTION : 1 LEFT HAND INSIDE											
Z/BV	.3170	4120	.5070	.6020	.6970	.7920					
X/CA	.7176	-.6324	-.6937	-.6937	-.6927	-.6780	-.6255				
Z/CA	.757	-.6892	-.6851	-.7029	-.6931	-.5967	-.6177				
X/CA	.874	-.6935	-.7067	-.7067	-.7008	-.5998	-.6742				
Z/CA	.8733	-.7247	-.7247	-.7277	-.6398	-.6733	-.6180				
X/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6293	-.6135				
Z/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6293	-.6135				
SECTION : 1 RIGHT HAND INSIDE											
Z/BV	.3170	4120	.5070	.6020	.6970	.7920					
X/CA	.7176	-.6324	-.6937	-.6937	-.6927	-.6780	-.6255				
Z/CA	.757	-.6892	-.6851	-.7029	-.6931	-.5967	-.6177				
X/CA	.874	-.6935	-.7067	-.7067	-.7008	-.5998	-.6742				
Z/CA	.8733	-.7247	-.7247	-.7277	-.6398	-.6733	-.6180				
X/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6293	-.6135				
Z/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6293	-.6135				
SECTION : 1 LEFT HAND INSIDE											
Z/BV	.3170	4120	.5070	.6020	.6970	.7920					
X/CA	.7176	-.6324	-.6937	-.6937	-.6927	-.6780	-.6255				
Z/CA	.757	-.6892	-.6851	-.7029	-.6931	-.5967	-.6177				
X/CA	.874	-.6935	-.7067	-.7067	-.7008	-.5998	-.6742				
Z/CA	.8733	-.7247	-.7247	-.7277	-.6398	-.6733	-.6180				
X/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6293	-.6135				
Z/CA	.8735	-.7235	-.7235	-.7277	-.6323	-.6293	-.6135				

ALPHA = 3.922 BETA (2) = .180 MACH = 1.2454 P = 599.82 RNL = 3.0214 (XEBK29)

SECTION : 1) RIGHT HEAD INSIDE DEPENDENT VARIABLE CP

X(C)	.7209	-.6753	.6909	-.6926	-.6753	-.6340
1.861	-.6711	-.6739	-.6993	-.6959	.0000	-.6281
1.855	-.6659	-.6857	-.7018	-.6958	-.5704	-.6250
1.857	-.6763	-.6863	-.7039	-.6957	-.6664	-.6228
1.863	-.6324	-.6525	-.7020	-.6874	-.6560	-.6178

ALPHA = 3.925 BETA (3) = 4.237 MACH = 1.2454 P = 599.82 RNL = 3.0214 (XEBK29)

SECTION : 1) RIGHT HEAD INSIDE DEPENDENT VARIABLE CP

X(C)	.7295	-.6949	.7090	-.7116	-.6439	-.6556
1.867	-.6633	-.6381	-.7135	-.7140	.0000	-.6516
1.865	-.6877	-.7033	-.7165	-.7154	-.6949	-.6494
1.867	-.6972	-.7119	-.7187	-.7159	-.6920	-.6451
1.869	-.7312	-.7135	-.7185	-.7102	-.6769	-.6352

ALPHA = 7.991 BETA (1) = -.3875 MACH = 1.2446 P = 599.59 RNL = 3.0209 (XEBK29)

SECTION : 1) RIGHT HEAD INSIDE DEPENDENT VARIABLE CP

X(C)	.7202	-.6754	.6914	-.6978	-.6832	-.6345
1.867	-.6741	-.6813	-.6973	-.7011	.0000	-.6290
1.866	-.6714	-.6867	-.6997	-.7040	-.6908	-.6360
1.867	-.6737	-.6892	-.7037	-.7059	-.6769	-.6276
1.869	-.5336	-.6533	-.7051	-.6350	-.6524	-.6118

ALPHA = 7.930 BETA (2) = .176 MACH = 1.2446 P = 599.59 RNL = 3.0205 (XEBK29)

SECTION : 1) RIGHT HEAD INSIDE DEPENDENT VARIABLE CP

X(C)	.7202	-.6825	.6924	-.6938	-.5855	-.5392
1.867	-.6736	-.6866	-.7029	-.7017	.0000	-.6355
1.868	-.6757	-.6921	-.7059	-.7040	-.6826	-.6338
1.869	-.6768	-.6921	-.7035	-.7055	-.6754	-.6306
1.870	-.6775	-.6919	-.7033	-.6355	-.6625	-.6244

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TASULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

(EX2X29)

$\alpha_{\text{PA}} = 7.335 \quad \beta_{\text{PA}} = 1.31 = 4.240 \quad \text{MACH} = 1.2446 \quad 0 = 599.59 \quad P = 552.98 \quad \text{RNL} = 3.0205$

SECTION 1 RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$\alpha_{\text{PA4+5)} = 11.923 \quad \beta_{\text{PA4+5)} = -3.851 \quad \text{MACH} = 1.2447 \quad 0 = 599.71 \quad P = 552.98 \quad \text{RNL} = 3.0237$

SECTION 1 RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$\alpha_{\text{PA4+5)} = 11.925 \quad \beta_{\text{PA4+5)} = -3.851 \quad \text{MACH} = 1.2447 \quad 0 = 599.71 \quad P = 552.98 \quad \text{RNL} = 3.0237$

SECTION 1 RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$\alpha_{\text{PA4+5)} = 11.927 \quad \beta_{\text{PA4+5)} = 4.253 \quad \text{MACH} = 1.2447 \quad 0 = 599.71 \quad P = 552.98 \quad \text{RNL} = 3.0237$

SECTION 1 RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$\alpha_{\text{PA4+5)} = 11.927 \quad \beta_{\text{PA4+5)} = 4.253 \quad \text{MACH} = 1.2447 \quad 0 = 599.71 \quad P = 552.98 \quad \text{RNL} = 3.0237$

SECTION 1 RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$\alpha_{\text{PA4+5)} = 11.927 \quad \beta_{\text{PA4+5)} = 4.253 \quad \text{MACH} = 1.2447 \quad 0 = 599.71 \quad P = 552.98 \quad \text{RNL} = 3.0237$

SECTION 1 RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

$\alpha_{\text{PA4+5)} = 11.927 \quad \beta_{\text{PA4+5)} = 4.253 \quad \text{MACH} = 1.2447 \quad 0 = 599.71 \quad P = 552.98 \quad \text{RNL} = 3.0237$

SECTION 1 RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

TABULATED PRESSURE DATA - OA143 (AMES 11-073-1)

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AMES 11-073(OA143) -140A/B/C/R ORB SPEED BRAKE

(13 PLG 75)

REFERENCE DATA

REF. = 3200.000 SC.FT. X_{RP} = 1076.6800 IN. X_O
 C_{REF} = 4.000 IN. Y_{RP} = .0000 IN. Y_O
 C_{REF} = 326.000 IN. Z_{RP} = 375.0000 IN. Z_O

$\alpha_{-P_{max}}$ (1) = -3.93+ BETA (1) = -3.852 MACH = 1.0997 0 = 600.21 P = 709.36 R_{FL} = 3.1908
 SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

2-B1: -3.70 -4.120 .5070 .6020 .6970 .7920

X(CP)
 1.8859 -.8251 -.8211 -.9272 -.7977 -.7273
 1.8633 -.8331 -.8319 .0000 -.7245
 1.8406 -.8414 -.8326 -.7305 -.7243
 1.8179 -.8522 -.8317 -.7158
 1.8034 -.8539 -.8192 -.7594 -.7042

$\alpha_{-P_{max}}$ (2) = -3.935 BETA (2) = .190 MACH = 1.0997 0 = 600.21 P = 709.36 R_{FL} = 3.1908
 SECTION 2: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

2-B2: -3.70 -4.120 .5070 .6020 .6970 .7920

X(CP)
 1.8359 -.8370 -.8215 -.8233 -.9041 -.7523
 1.8025 -.8355 -.8234 -.8361 .0000 -.7493
 1.7693 -.8155 -.8436 -.8254 -.8009 -.7481
 1.6362 -.8255 -.8255 -.8253 -.7959 -.7481
 1.3112 -.8173 -.8144 -.8193 -.7873 -.7370

$\alpha_{-P_{max}}$ (3) = -3.932 BETA (3) = 4.268 MACH = 1.0997 0 = 600.21 P = 709.36 R_{FL} = 3.1908
 SECTION 3: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

3-B1: -3.70 -4.120 .5070 .6020 .6970 .7920
 X(CP)
 1.8247 -.8120 -.8236 -.8269 -.8123 -.7575
 1.8016 -.8171 -.8353 -.8373 -.8003 -.7549
 1.7785 -.8247 -.8454 -.8329 -.8045 -.7514
 1.6454 -.8342 -.8525 -.8312 -.8053 -.7477
 1.3212 -.8541 -.8773 -.8250 -.7355 -.7398

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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$\Delta\text{P/A} : 2) = -.020 \quad \text{BET_A (1)} = -3.865 \quad \text{MACH} = 1.0986 \quad \text{P} = 599.48 \quad \text{P} = 709.54 \quad \text{RNL} = 3.1896$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.8095 -.7882 -.8047 -.8141 -.7686 -.7159

.757 -.7829 -.7906 -.8162 -.8215 .0000 -.7153

.805 -.7788 -.8033 -.8283 -.8231 -.7827 -.7143

.897 -.7854 -.8194 -.8355 -.8219 -.7763 -.7111

.359 -.7944 -.6264 -.8380 -.8177 -.7590 -.6952

 $\Delta\text{P/A} : 2) = -.014 \quad \text{BET_A (2)} = .187 \quad \text{MACH} = 1.0986 \quad \text{O} = 599.48 \quad \text{P} = 709.54 \quad \text{RNL} = 3.1896$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.8203 -.7952 -.8068 -.8116 -.7943 -.7427

.757 -.7922 -.7948 -.8177 -.8163 .0000 -.7403

.805 -.7859 -.8052 -.8268 -.8177 -.7900 -.7420

.837 -.8141 -.8238 -.8383 -.8161 -.7874 -.7409

.568 -.8000 -.8354 -.8367 -.8064 -.7777 -.7295

 $\Delta\text{P/A} : 2) = -.017 \quad \text{BET_A (3)} = 4.244 \quad \text{MACH} = 1.0986 \quad \text{O} = 599.48 \quad \text{P} = 709.54 \quad \text{RNL} = 3.1896$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.8409 -.8059 -.8210 -.8229 -.8049 -.7541

.757 -.7957 -.5289 -.8295 -.8269 .0000 -.7524

.835 -.7941 -.8154 -.8399 -.8283 -.8028 -.7498

.837 -.8148 -.8335 -.8335 -.8262 -.8002 -.7428

.333 -.8135 -.8136 -.8137 -.8193 -.7926 -.7324

 $\Delta\text{P/A} : 3) = 3.942 \quad \text{BET_A (1)} = -3.869 \quad \text{MACH} = 1.1006 \quad \text{O} = 600.44 \quad \text{P} = 708.14 \quad \text{RNL} = 3.1896$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7736 -.7709 -.7254 -.7937 -.7705 -.6983

.757 -.7632 -.7727 -.7577 -.8017 .0000 -.6957

.695 -.7555 -.7772 -.9132 -.8193 -.7629 -.6948

.667 -.7632 -.7558 -.8232 -.8189 -.7568 -.6853

.563 -.7442 -.8355 -.8213 -.7346 -.7393 -.6742

(XEBK30)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE							PAGE E285
DEPENDENT VARIABLE CP							(XEBK30)
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV	.708	-.8025	-.7855	-.7983	-.8035	-.7834	-.7310
	.757	-.7737	-.7839	-.8086	-.8082	.0000	-.7291
	.825	-.7707	-.791+	-.8209	-.8105	-.7780	-.7277
	.897	-.7773	-.8126	-.8315	-.8082	-.7730	-.7248
	.968	-.7867	-.8239	-.8301	-.7971	-.7619	-.7161
ALPHA (3) = 3.950	BETA (2) = .177	MACH = 1.1006	O = 600.44	P = 708.14	RNL = 3.1894		
SECTION 1) RIGHT HAND INSIDE							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV	.799	-.8227	-.7949	-.8139	-.8186	-.7922	-.7333
	.757	-.7645	-.7931	-.8252	-.8222	.0000	-.7319
	.825	-.7821	-.8396	-.8394	-.8203	-.7853	-.7286
	.897	-.7934	-.8316	-.8465	-.8185	-.7780	-.7229
	.968	-.8048	-.8430	-.8434	-.8082	-.7671	-.7130
ALPHA (4) = 8.035	BETA (1) = -.3.862	MACH = 1.0985	O = 599.52	P = 709.77	RNL = 3.1893		
SECTION 1) RIGHT HAND INSIDE							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CV	.709	-.7354	-.7293	-.7471	-.7539	-.7282	-.6494
	.757	-.7212	-.7323	-.7629	-.7631	.0000	-.6480
	.825	-.7120	-.7434	-.7756	-.7199	-.6468	
	.897	-.7234	-.7634	-.7955	-.7704	-.7126	-.6422
	.968	-.7378	-.7539	-.7872	-.7553	-.6928	-.6321
ALPHA (4) = 8.041	BETA (2) = .181	MACH = 1.0985	O = 599.52	P = 709.77	RNL = 3.1893		
SECTION 1) RIGHT HAND INSIDE							
Z/BV	.3170	.4120	.5070	.6020	.5970	.7920	
X/CV	.709	-.7688	-.7574	-.7750	-.7793	-.7573	-.6986
	.757	-.7464	-.7612	-.7862	-.7852	.0000	-.6991
	.825	-.7449	-.7620	-.8056	-.7847	-.7930	-.6979
	.897	-.7529	-.7932	-.8103	-.7850	-.7445	-.6938
	.968	-.7648	-.8035	-.8291	-.7722	-.7332	-.6884

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TABULATED PRESSURE DATA - CA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

ALPHA : 61 = 8. C40 BETA : 3 = 4.238 MACH = 1.0985 0 = 599.52 P = 709.77 RN/L = 3.1893

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.2251 -.7939 -.8161 -.8153 -.7924 -.7332

.757 -.7897 -.7939 -.8269 -.8194 -.0000 -.7299

.625 -.7865 -.8112 -.8357 -.8229 -.7872 -.7265

.697 -.7937 -.8320 -.8392 -.8220 -.7820 -.7247

.659 -.8093 -.8359 -.8357 -.8368 -.7691 -.7146

ALPHA : 51 = 11.975 BETA : 1 = -3.843 MACH = 1.0970

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.7537 -.7480 -.7662 -.7679 -.7398 -.6736

.757 -.7374 -.7502 -.7792 -.7773 -.0000 -.6698

.625 -.7334 -.7599 -.7913 -.7818 -.7341 -.6724

.697 -.7326 -.7713 -.8030 -.7773 -.7291 -.6627

.659 -.7561 -.7937 -.8014 -.7617 -.7121 -.6490

ALPHA : 51 = 11.995 BETA : 2 = .181 MACH = 1.0970

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.7651 -.7753 -.7518 -.7592 -.7755 -.7216

.757 -.7692 -.7781 -.8008 -.8041 -.0000 -.7234

.625 -.7501 -.7828 -.8173 -.8062 -.7705 -.7189

.697 -.6558 -.8006 -.8277 -.8048 -.7634 -.7133

.659 -.7765 -.9197 -.8263 -.7937 -.7544 -.7029

ALPHA : 51 = 11.977 BETA : 3 = 4.253 MACH = 1.0970

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.6251 -.2327 -.9253 -.5123 -.7854 -.7201

.757 -.7825 -.9259 -.8250 -.8208 -.0000 -.7189

.625 -.8225 -.8216 -.8217 -.8225 -.7783 -.7192

.697 -.6251 -.8413 -.8412 -.8170 -.7698 -.7134

.659 -.8233 -.8253 -.8254 -.8239 -.7603 -.7058

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R SPEED BRAKE

(XEBK31) (13 AUG 75)

REFERENCE DATA

SUPERF = 2630.0000 SQ.FT. XMRP = 1076.6800 IN. X0
 LREF = 674.0000 IN. YMRP = .0000 IN. Y0
 SREF = 935.0580 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .3300

ALPHA (1) = -3.977 BETA (1) = -3.852 MACH = .89977 Q = 600.28 P = 1059.2 RN/L = 3.5777

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .728 -.5220 -.5231 -.5628 -.5831 -.5379 -.4215
 .751 -.5101 -.5347 -.5928 -.5642 .0000 -.4165
 .805 -.5154 -.5494 -.6158 -.5975 -.5171 -.4177
 .887 -.6234 -.6118 -.6427 -.6025 -.5060 -.4096
 .968 -.5919 -.6548 -.6510 -.5940 -.5001 -.4048

ALPHA (2) = -3.975 BETA (2) = .167 MACH = .89977 Q = 600.28 P = 1059.2 RN/L = 3.5777

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .728 -.5560 -.5563 -.6020 -.6197 -.5774 -.4465
 .757 -.5433 -.5517 -.6235 -.6350 .0000 -.4420
 .805 -.5445 -.5879 -.6489 -.6354 -.5538 -.4443
 .887 -.5787 -.5533 -.6691 -.6249 -.5364 -.4370
 .968 -.6089 -.6818 -.6591 -.6147 -.5291 -.4266

ALPHA (3) = -3.935 BETA (3) = 4.269 MACH = .89977 Q = 600.28 P = 1059.2 RN/L = 3.5777

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .728 -.6146 -.6337 -.6794 -.5474 -.5941 -.4653
 .757 -.6223 -.6503 -.6950 -.6635 .0000 -.4624
 .805 -.6193 -.6816 -.7285 -.5597 -.5792 -.4612
 .887 -.6657 -.7201 -.7233 -.6550 -.5650 -.4547
 .968 -.6872 -.7393 -.7367 -.6451 -.5486 -.4400

PARAMETRIC DATA

RUDDER = -10.000 SPDBRK = 35.000
 BOFLAP = 16.300 L-ELVN = 10.000
 R+ELVN = .000 NACH = .900

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TABULATED PRESSURE DATA - GA14B (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

(XEBK31)

$\alpha_{\text{LPA}} : \beta_1 = -0.302$ $\text{BETA} : 1 = -3.870$ MACH = .89780 Q = 598.63 P = 1060.9 RN/L = 3.5706

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, av .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5292 -.5398 -.5929 -.5843 -.5304 -.3915

-.5129 -.5328 -.6160 -.5957 .0000 -.3806

-.5183 -.5771 -.6403 -.5094 -.5049 -.3806

-.5447 -.6452 -.6533 -.6016 -.4931 -.3770

-.5965 -.6573 -.6556 -.5862 -.4862 -.3709

 $\alpha_{\text{LPA}} : \beta_1 = -0.020$ $\text{BETA} : 2 = -1.18$ MACH = .89780 Q = 598.63 P = 1060.9 RN/L = 3.5706

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, av .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5549 -.5774 -.6032 -.6107 -.5653 -.4511

-.5403 -.5954 -.6261 -.6280 .0000 -.4566

-.5514 -.6057 -.6517 -.6273 -.5476 -.4381

-.5862 -.6549 -.6577 -.6221 -.5374 -.4268

-.6204 -.6832 -.6737 -.6152 -.5280 -.4199

 $\alpha_{\text{LPA}} : \beta_1 = -0.10$ $\text{BETA} : 3 = -4.247$ MACH = .89780 Q = 598.63 P = 1060.9 RN/L = 3.5706

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, av .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5124 -.6356 -.6835 -.6280 -.5582 -.4346

-.5553 -.5553 -.5835 -.6374 .0000 -.4271

-.6203 -.6924 -.6223 -.6469 -.5425 -.4306

-.6507 -.7194 -.6623 -.6419 -.5752 -.4241

-.6795 -.7114 -.6352 -.6277 -.5217 -.4050

 $\alpha_{\text{LPA}} : \beta_1 = -3.384$ $\text{BETA} : 4 = -3.872$ MACH = .89780 Q = 599.00 P = 1059.5 RN/L = 3.5709

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, av .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5257 -.5259 -.5811 -.5301 -.5204 -.3680

-.5145 -.5332 -.5647 -.6090 .0000 -.3668

-.5162 -.5712 -.6251 -.5645 -.5014 -.3568

-.6219 -.6319 -.6549 -.5293 -.4882 -.3522

-.6334 -.6517 -.6534 -.5754 -.4714 -.3403

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(AM148) - 140A/B/C/R ORB SPEED BRAKE

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.759 -.5501 -.5634 -.6030 -.6073 -.5480 -.4236

.757 -.5349 -.5734 -.6223 -.6218 -.0000 -.4189

.835 -.5494 -.6130 -.6420 -.6097 -.5345 -.4189

.897 -.5791 -.6558 -.6596 -.6080 -.5157 -.4006

.953 -.6125 -.5782 -.6649 -.6600 -.5055 -.3902

ALPHA (3) = 3.979 BETA (3) = 4.243 MACH = .89870 0 = 599.00 P = 1059.5 RN/L = 3.5709

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.758 -.6076 -.6225 -.6463 -.5837 -.5121 -.4006

.757 -.6039 -.6493 -.6587 -.6046 -.0000 -.4056

.835 -.6111 -.6573 -.6591 -.6329 -.4983 -.3982

.897 -.6412 -.6709 -.6546 -.6115 -.4874 -.3951

.953 -.5671 -.6675 -.5504 -.5809 -.4720 -.3802

ALPHA (4) = 8.057 BETA (1) = -3.860 MACH = .89807 0 = 598.57 P = 1060.2 RN/L = 3.5677

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.758 -.5394 -.5465 -.6001 -.5923 -.5314 -.3731

.757 -.5194 -.5610 -.6313 -.5120 -.0000 -.3824

.835 -.5221 -.5952 -.6481 -.6115 -.5057 -.3709

.897 -.5434 -.6782 -.6589 -.5934 -.4931 -.3500

.953 -.5622 -.6331 -.6553 -.5905 -.4939 -.3336

ALPHA (4) = 2.254 BETA (2) = .187 MACH = .89807 0 = 598.57 P = 1060.2 RN/L = 3.5677

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.5401 -.5557 -.6017 -.5326 -.5326 -.4163

.5371 -.5561 -.6243 -.5691 -.5691 -.4259

.6131 -.6139 -.6117 -.6119 -.5332 -.4264

.6665 -.6774 -.6521 -.6574 -.5034 -.3911

.6626 -.6625 -.6473 -.5933 -.4352 -.3906

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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$\alpha_{\text{BLA}} + \beta = 8.059$ $\beta_{\text{TA}} + 3 = 4.245$ MACH = .89807 0 = 598.57 P = 1060.2 RNL = 3.5677

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV

.708 .6987 -.6113 -.6506 -.5995 -.5260 -.3827
 .757 -.5943 -.6353 -.6705 -.6137 .0000 -.3872
 .805 -.5935 -.6325 -.6717 -.6938 -.5999 -.4041 -.3908
 .857 -.6324 -.6623 -.6723 -.6629 -.6014 -.4593 -.3798
 .902 -.6580 -.6625 -.6539 -.5919 -.4602 -.3504

$\alpha_{\text{PLA}} + 5 = 11.983$ $\beta_{\text{TA}} + 11 = -3.854$ MACH = .89717 0 = 598.01 P = 1061.4 RNL = 3.5714

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV

.708 .6594 -.5469 -.6085 -.6026 -.5393 -.3914
 .757 -.5413 -.5576 -.6451 -.6250 .0000 -.3835
 .805 -.5725 -.5974 -.6734 -.6312 -.5234 -.3859
 .857 -.5653 -.5532 -.6923 -.6175 -.4934 -.3725
 .902 -.5363 -.6943 -.6773 -.6055 -.4659 -.2583

$\alpha_{\text{PLA}} + 5 = 11.983$ $\beta_{\text{TA}} + 21 = .164$ MACH = .89717 0 = 598.01 P = 1061.4 RNL = 3.5714

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV

.708 -.5818 -.5957 -.6451 -.6229 -.5541 -.4190
 .757 -.5772 -.5322 -.6755 -.5468 .0000 -.4105
 .805 -.5810 -.6162 -.5847 -.6433 -.4026 -.4026
 .857 -.6168 -.6268 -.6364 -.6257 -.5247 -.2979
 .902 -.6263 -.6363 -.6393 -.6126 -.5033 -.3253

$\alpha_{\text{PLA}} + 5 = 11.375$ $\beta_{\text{TA}} + 31 = 4.253$ MACH = .89717 0 = 598.01 P = 1061.4 RNL = 3.5714

SECTION 1: LEFT SIDE INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV

.708 -.6122 -.6555 -.6937 -.6149 -.5334 -.4184
 .757 -.6167 -.6546 -.6635 -.6310 .0000 -.4056
 .805 -.6212 -.6711 -.6312 -.6193 -.5197 -.4082
 .857 -.6240 -.7223 -.6681 -.6270 -.5132 -.4073
 .902 -.6214 -.7163 -.6218 -.6123 -.4938 -.4085

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

Z-EFF	=	4335.000 SC.FT.	X _{CP}	=	1076.6800 IN. X ₀
Z-EFF	=	+74.6000 IN.	Y _{CP}	=	.0000 IN. Y ₀
Z-EFF	=	935.050 IN.	Z _{CP}	=	375.0000 IN. Z ₀
SCALE	=	.3300			

A₋₂PH_A (1) = -4.052 SETA (1) = -7.850 MACH = .59664 0 = 594.68 P = 2386.3 RN/L = 4.8170

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.159	-5.224	-5.373	-5.584	-5.191	-4.024	-3038
.157	-5.535	-5.3	-6.077	-5.00	.0000	-3000
.095	-5.053	-5.925	-6.355	-5.319	-3977	-2988
.087	-5.372	-6.653	-6.522	-5.145	-3841	-3009
.088	-5.532	-6.753	-6.5275	-4.775	-3770	-2990

A₋₂PH_A (1) = -4.036 SETA (2) = -3.835 MACH = .59664 0 = 594.68 P = 2386.3 RN/L = 4.8170

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.158	-4.915	-5.195	-5.850	-5.295	-4.187	-2976
.157	-4.864	-5.333	-6.923	-5.413	.0000	-2984
.155	-4.945	-5.553	-6.562	-5.351	-4.104	-2975
.087	-5.377	-6.680	-6.277	-5.192	-3905	-2992
.088	-5.533	-6.655	-6.561	-5.621	-3777	-2997

A₋₂PH_A (1) = -4.026 SETA (3) = .192 MACH = .59664 0 = 594.68 P = 2386.3 RN/L = 4.8170

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.159	-5.239	-5.514	-6.172	-5.549	-4.485	-2978
.157	-5.564	-5.633	-6.321	-5.654	.0009	-3018
.085	-5.212	-6.322	-6.222	-5.554	-4.180	-3054
.087	-5.42	-6.661	-6.628	-5.65	-4.024	-2895
.088	-5.611	-6.753	-6.534	-5.232	-3619	-2958

PARAMETRIC DATA

(XEBK32) (13 AUG 75)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED L,D.							(XEB32)	
ALPHA (1) = -4.028	BETA (4) = 4.273	MACH = .59664	O = 594.68	P = 2386.3	RNL = 4.8170			
SECTION 1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.798	-.5597	-.6130	-.6508	-.5746	-.4524	-.3093		
.757	-.5577	-.6354	-.5686	-.5850	.0000	-.3081		
.605	-.5833	-.6714	-.6714	-.5841	-.4274	-.3119		
.697	-.6203	-.6912	-.6795	-.5815	-.4255	-.3082		
.958	-.6485	-.6934	-.6702	-.5595	-.4013	-.3179		
ALPHA (1) = -4.045	BETA (5) = 8.346	MACH = .59664	O = 594.68	P = 2386.3	RNL = 4.8170			
SECTION 1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.798	-.6528	-.6922	-.7196	-.6118	-.4627	-.3065		
.757	-.6467	-.7275	-.7286	-.6301	.0000	-.3122		
.605	-.6923	-.7442	-.7269	-.6258	-.4499	-.3163		
.897	-.7051	-.7539	-.7395	-.6277	-.4326	-.3359		
.558	-.7240	-.7436	-.7241	-.6042	-.2926	-.3500		
ALPHA (2) = .034	BETA (1) = -7.883	MACH = .59662	O = 593.85	P = 2386.3	RNL = 4.8132			
SECTION 1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.798	-.5551	-.5761	-.6413	-.5595	-.4054	-.2576		
.757	-.5469	-.6039	-.6632	-.5744	.0000	-.2554		
.605	-.5487	-.6552	-.6927	-.5699	-.3890	-.2597		
.897	-.5919	-.6925	-.6969	-.5594	-.3632	-.2743		
.558	-.6399	-.7092	-.6677	-.5995	-.3547	-.2656		
A_P-A (2) = .C43	BETA (2) = -3.857	MACH = .59662	O = 593.85	P = 2386.3	RNL = 4.8132			
SECTION 1) RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.798	-.5110	-.5459	-.6105	-.5300	-.4094	-.2786		
.757	-.5025	-.5727	-.6242	-.5509	.0000	-.2784		
.605	-.5143	-.6207	-.6772	-.5474	-.3880	-.2762		
.897	-.5737	-.6594	-.6568	-.5283	-.3787	-.2730		
.558	-.6169	-.6774	-.6430	-.4981	-.3535	-.2744		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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(XEBK32)

SECTION	RIGHT HAND INSIDE	DEPENDENT VARIABLE CP	MACH	P	RNL
2-3	.3170 .4120 .5070	.6020 .6970 .7920	.593.85	.2386.3	.4.8132
X/CY					
2-3-A (2) = .045	BETA (3) = .185	DEPENENT VARIABLE CP	MACH = .59622	O = .593.85	P = .2386.3
2-3-B	.3170 .4120 .5070	.6020 .6970 .7920	.593.85	.2386.3	.4.8132
X/CY					
2-3-C (1) = .041	BETA (4) = .251	DEPENENT VARIABLE CP	MACH = .59622	O = .593.85	P = .2386.3
2-3-D	.3170 .4120 .5070	.6020 .6970 .7920	.593.85	.2386.3	.4.8132
X/CY					
2-3-E (1) = .035	BETA (5) = .312	DEPENENT VARIABLE CP	MACH = .59622	O = .593.85	P = .2386.3
2-3-F	.3170 .4120 .5070	.6020 .6970 .7920	.593.85	.2386.3	.4.8132
X/CY					
2-3-G (1) = .031+	BETA (1) = .879	DEPENENT VARIABLE CP	MACH = .59602	O = .593.50	P = .2386.4
2-3-H	.3170 .4120 .5070	.6020 .6970 .7920	.593.50	.2386.4	.4.8147
X/CY					
2-3-I (1) = .028	BETA (2) = .555	DEPENENT VARIABLE CP	MACH = .59321	.4.94	.2588
2-3-J	.3170 .4120 .5070	.6020 .6970 .7920	.5931	.0000	.2529
2-3-K	.3170 .4120 .5070	.6020 .6970 .7920	.5932	.4.56	.2.45
2-3-L	.3170 .4120 .5070	.6020 .6970 .7920	.5933	.3839	.2372
2-3-M	.3170 .4120 .5070	.6020 .6970 .7920	.59337	.5269	.2372

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DATE 11- FEB-75

TABULATED PRESSURE DATA - CA148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE							PAGE 6535
ALPHA (deg)	9.080	BETA (deg)	-7.877	MACH	.59636	P	RNL = .8181
SECTION : INLET/H&C INSIDE DEPENDENT VARIABLE CP							
Z/37	.3170	.4120	.5070	.6320	.6970	.7920	
SECTION : INLET/H&C INSIDE DEPENDENT VARIABLE CP							
Z/37	.3170	.4120	.5070	.6020	.6970	.7920	
SECTION : INLET/H&C INSIDE DEPENDENT VARIABLE CP							
Z/37	.3170	.4120	.5070	.6023	.6970	.7920	
SECTION : INLET/H&C INSIDE DEPENDENT VARIABLE CP							
Z/37	.3170	.4120	.5070	.6023	.6970	.7920	
SECTION : INLET/H&C INSIDE DEPENDENT VARIABLE CP							
Z/37	.3170	.4120	.5070	.6023	.6970	.7920	

DATE 10-26-76

TAE-LATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA : 41 = 8.032 BETA : 1 51 = 8.301 MACH = .59636 0 = 594.21 P = 2386.7 RNL = 4.8161
 SECTION : 1)RIGHT HAD.C IN SIDE DEPENDENT VARIABLE CP

Z/BY -3170 -.4120 .5070 .6020 .6970 .7920
 X/CY -.5455 -.6780 -.6916 -.5896 -.4265 -.3129
 .5387 -.7293 -.6339 -.5737 .0000 -.3146
 .6615 -.7220 -.7223 -.5770 -.4108 -.3151
 .6619 -.7223 -.7221 -.6324 -.4210 -.3219
 .6635 -.7223 -.6539 -.5571 -.3568 -.3424

ALPHA : 51 = 12.017 BETA : 1 11 = -7.830 MACH = .59626 0 = 593.97 P = 2386.7 RNL = 4.8175
 SECTION : 1)RIGHT HAD.C IN SIDE DEPENDENT VARIABLE CP

Z/BY -.3170 -.4120 .5270 .5020 .6970 .7920
 X/CY -.6104 -.6457 -.7472 -.5306 -.2742 -.1933
 .5656 -.6714 -.7512 -.5275 .0000 -.2026
 .5659 -.7160 -.7839 -.5029 -.2740 -.2045
 .6713 -.6320 -.7794 -.5817 -.2564 -.2162
 .6752 -.8335 -.7378 -.3978 -.2539 -.2292

ALPHA : 51 = 12.035 BETA : 21 = -3.825 MACH = .59626 0 = 593.97 P = 2386.7 RNL = 4.8175
 SECTION : 1)RIGHT HAD.C IN SIDE DEPENDENT VARIABLE CP

Z/BY -.3170 -.4120 .5070 .6020 .6970 .7920
 X/CY -.5218 -.5232 -.5108 -.5514 -.3983 -.2393
 .5657 -.5922 -.6133 -.5625 .0000 -.2510
 .6651 -.6132 -.6516 -.5495 -.3665 -.2548
 .6655 -.6132 -.6511 -.5428 -.3535 -.2259
 .6658 -.6132 -.6515 -.4938 -.3398 -.2180

ALPHA : 51 = 12.033 BETA : 1 31 = .185 MACH = .59626 0 = 593.97 P = 2386.7 RNL = 4.8175
 SECTION : 1)RIGHT HAD.C IN SIDE DEPENDENT VARIABLE CP

Z/BY -.3170 -.4120 .5070 .6020 .6970 .7920
 X/CY -.5812 -.5832 -.6123 -.5577 -.4402 -.2770
 .5815 -.5835 -.6123 -.5657 -.0003 -.2778
 .6816 -.6123 -.6123 -.5566 -.163 -.2763
 .6817 -.6123 -.6123 -.5633 -.5562 -.4349 -.2778
 .6818 -.6123 -.6123 -.5633 -.5562 -.4349 -.2778
 .6819 -.6123 -.6123 -.5633 -.5562 -.4349 -.2778
 .6820 -.6123 -.6123 -.5633 -.5562 -.4349 -.2778

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TRANSLATED PRESSURE DATA - OA1148 (AMES 11-073-1)

4.255 MACH = .59526 0 = 593.97 > = 2386.7 R/L = 4.3175
DEPENDENT VARIABLE CP (DEB32)

DEPENDENT VARIABLE CP

EDISON: Great Western - 1900-1905

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

Z/EF	2620.000 S2.FT.	XNRP	= 1076.6800 IN. X0
Z/EF	.474 .8000 IN.	YNRP	= .0000 IN. Y0
Z/EF	.975 .290 IN.	ZNRP	= .375.0000 IN. Z0
SCALE	.0330		

ALPHA (11) = -4.110 BETA (1) = -3.848 MACH = 1.3952

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	-.5555	-.5455	-.5564	-.5573	-.5422	-.5211
.757	-.5245	-.5451	-.5599	-.5516	-.5000	-.5091
.805	-.5343	-.5480	-.5630	-.5533	-.5377	-.4965
.887	-.5378	-.5550	-.5644	-.5552	-.5315	-.4923
.952	-.5281	-.5591	-.5647	-.5573	-.5254	-.4890

ALPHA (11) = -4.105 BETA (2) = .195 MACH = 1.3952

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	-.5435	-.5429	-.5524	-.5552	-.5379	-.5051
.757	-.5351	-.5438	-.5559	-.5507	-.0000	-.4954
.805	-.5337	-.5474	-.5522	-.5512	-.5234	-.4937
.887	-.5375	-.5531	-.5601	-.5521	-.5212	-.4956
.952	-.5362	-.5559	-.5627	-.5533	-.5103	-.4868

ALPHA (11) = -4.114 BETA (3) = .4277 MACH = 1.3952

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	-.5532	-.5453	-.5614	-.5628	-.5307	-.4832
.757	-.5423	-.5457	-.5671	-.5576	.0000	-.4813
.805	-.5396	-.5516	-.5711	-.5554	-.5174	-.4770
.887	-.5405	-.5649	-.5723	-.5553	-.5106	-.4805
.952	-.5412	-.5712	-.5730	-.5553	-.4971	-.4990

PARAMETRIC DATA

(XEBK33)

(13 AUG 75)

SPDBRK =

10.000

BOFLAP =

16.300

L-ELVN =

10.000

MACH =

1.400

RN/L =

2.9043

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE
A_EPA : 2) = -.049 BETA (1) = -3.866 MACH = 1.3944 Q = 599.11 P = 440.18 RN/L = 2.9098

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.5609 -.5507 -.5603 -.5622 -.5482 -.5295

.757 -.5468 -.5510 -.5641 -.5592 -.0000 -.5154

.805 -.5411 -.5539 -.5686 -.5534 -.5449 -.5017

.897 -.5446 -.5644 -.5697 -.5696 -.5388 -.5010

.958 -.5450 -.5674 -.5700 -.5629 -.5329 -.4951

ALPHA (2) = -.046 BETA (2) = .181 MACH = 1.3944 Q = 599.11 P = 440.18 RN/L = 2.9098

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5553 -.5480 -.5607 -.5635 -.5491 -.5188

.757 -.5390 -.5434 -.5649 -.5590 -.0000 -.5081

.805 -.5374 -.5539 -.5675 -.5597 -.5391 -.4942

.897 -.5424 -.5518 -.5662 -.5662 -.5337 -.4931

.958 -.5438 -.5564 -.5711 -.5616 -.5254 -.4846

ALPHA (2) = -.050 BETA (3) = 4.255 MACH = 1.3944 Q = 599.11 P = 440.18 RN/L = 2.9098

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5641 -.5537 -.5691 -.5719 -.5497 -.4996

.757 -.5469 -.5540 -.5748 -.5584 -.0000 -.4953

.805 -.5455 -.5575 -.5778 -.5591 -.5352 -.4850

.887 -.5490 -.5639 -.5797 -.5562 -.5286 -.4825

.958 -.5474 -.5750 -.5793 -.5693 -.5170 -.4891

ALPHA (3) = 3.865 BETA (1) = -3.853 MACH = 1.3948 Q = 599.42 P = 440.18 RN/L = 2.9147

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.5705 -.5610 -.5721 -.5744 -.5679 -.5367

.757 -.5511 -.5617 -.5761 -.5721 -.5303 -.5241

.805 -.5516 -.5550 -.5792 -.5716 -.5322 -.5167

.897 -.5559 -.5579 -.5810 -.5823 -.5249 -.5075

.958 -.5543 -.5643 -.5637 -.5637 -.5137 -.5067

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE SECTION (1) RIGHT HAND INSIDE							(XEBR33)		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	P = 440.18	RN/L = 2.9147	
X/CV							DEPENDENT VARIABLE CP		
.708	-.5603	-.5530	-.5664	-.5698	-.5563	-.5276			
.757	-.5445	-.5556	-.5714	-.5684	-.0000	-.5139			
.605	-.5445	-.5570	-.5742	-.5664	-.5489	-.504			
.887	-.5490	-.5643	-.5757	-.5867	-.5430	-.4956			
.968	-.5485	-.5671	-.5755	-.5695	-.5383	-.4878			
ALPHA (3) = 3.895 BETA (2) = .190 MACH = 1.3948 Q = 599.42 P = 440.18 RN/L = 2.9147									
SECTION (1) RIGHT HAND INSIDE							DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CV							DEPENDENT VARIABLE CP		
.709	-.5675	-.5578	-.5697	-.5753	-.5642	-.5224			
.757	-.5536	-.5578	-.5732	-.5739	.0000	-.5089			
.805	-.5522	-.5592	-.5779	-.5742	-.5524	-.4997			
.897	-.5531	-.5666	-.5801	-.5737	-.5472	-.4976			
.958	-.5430	-.5721	-.5779	-.5756	-.5463	-.4879			
ALPHA (4) = 7.917 BETA (1) = -3.865 MACH = 1.3944 Q = 599.72 P = 440.65 RN/L = 2.9146									
SECTION (1) RIGHT HAND INSIDE							DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CV							DEPENDENT VARIABLE CP		
.709	-.5844	-.5743	-.5841	-.5867	-.5709	-.5452			
.757	-.5546	-.5754	-.5888	-.5851	.0000	-.5355			
.805	-.5546	-.5725	-.5923	-.5851	-.5634	-.5243			
.897	-.5629	-.5687	-.5833	-.5851	-.5560	-.5236			
.958	-.5684	-.5925	-.5937	-.5655	-.5549	-.5158			
ALPHA (4) = 7.916 BETA (2) = .185 MACH = 1.3944 Q = 599.72 P = 440.65 RN/L = 2.9146									
SECTION (1) RIGHT HAND INSIDE							DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CV							DEPENDENT VARIABLE CP		
.708	-.5595	-.5536	-.5769	-.5807	-.5676	-.5390			
.757	-.5565	-.5650	-.5811	-.5776	.0000	-.5259			
.605	-.5551	-.5696	-.5940	-.5750	-.5603	-.5159			
.897	-.5586	-.5743	-.5849	-.5793	-.5549	-.5094			
.958	-.5579	-.5775	-.5847	-.5915	-.5527	-.5039			

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

(XE8K33)

ALPHA (6) = 15.849 BETA (1) = -3.830 MACH = 1.3950 0 = 599.93 P = 440.41 RNL = 2.9147

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/AV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6199	-.6010	-.6122	-.6165	-.5853	-.5456
.757	-.5956	-.6015	-.6179	-.6122	.0000	.5385
.805	-.5925	-.6050	-.6217	-.6124	-.5775	-.5498
.887	-.5954	-.6158	-.6235	-.6103	-.5697	-.5491
.968	-.5958	-.6214	-.6240	-.6068	-.5595	-.5491

ALPHA (6) = 15.859 BETA (2) = 186 MACH = 1.3950 0 = 599.93 P = 440.41 RNL = 2.9147

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/AV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5921	-.5807	-.5930	-.5947	-.5816	-.5556
.757	-.5748	-.5803	-.5965	-.5928	.0000	.5448
.805	-.5739	-.5850	-.5984	-.5928	-.5760	-.5348
.887	-.5770	-.5944	-.5991	-.5930	-.5715	-.5340
.968	-.5781	-.5968	-.5991	-.5949	-.5664	-.5267

ALPHA (6) = 15.851 BETA (3) = 4.283 MACH = 1.3950 0 = 599.93 P = 440.41 RNL = 2.9147

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/AV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5992	-.5993	-.5973	-.6048	-.5963	-.5861
.757	-.5839	-.5933	-.6010	-.6023	.0000	.5609
.805	-.5832	-.5912	-.6336	-.6034	-.5256	-.5501
.887	-.5932	-.6251	-.6355	-.6338	-.5852	-.5446
.968	-.5923	-.5939	-.6043	-.6055	-.5841	-.5380

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SPEC = 3000 SQ.FT. XMRP = 1076.6800 IN. XO
 UREF = .8200 IN. YMRP = 0.0000 IN. YO
 DREF = 935.0500 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .2300

ALPHA (1) = -4.354 BETA (1) = -3.845 MACH = 1.2480

SECTION : 1:IGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3172 .4120 .5070 .6020 .6970 .7920

X/CV
 .708 -.6745 -.6630 -.6778 -.6774 -.6594 -.6358
 .75 -.6625 -.6537 -.6635 -.6750 -.0000 -.6193
 .805 -.6532 -.6572 -.6863 -.6760 -.6524 -.6014
 .897 -.6345 -.6807 -.6996 -.6752 -.6476 -.6041
 .926 -.5351 -.6853 -.6866 -.6790 -.6453 -.5944

ALPHA (1) = -4.041 BETA (2) = .192 MACH = 1.2480

SECTION : 1:IGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3172 .4120 .5070 .6020 .6970 .7920

X/CV
 .708 -.6624 -.6548 -.6711 -.6702 -.6555 -.6182
 .757 -.6-44 -.6553 -.6751 -.6689 -.0000 -.6012
 .805 -.6-23 -.6600 -.6920 -.6692 -.6430 -.5875
 .897 -.5-59 -.5714 -.6843 -.6692 -.6366 -.5856
 .926 -.6-44 -.6759 -.6791 -.6719 -.6326 -.5773

ALPHA (1) = -4.351 BETA (3) = 4.275 MACH = 1.2480

SECTION : 1:IGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3172 .4120 .5070 .6020 .6970 .7920

X/CV
 .708 -.6637 -.6553 -.6933 -.5925 -.6595 -.6093
 .757 -.6576 -.6518 -.6593 -.6329 -.0000 -.5968
 .805 -.6557 -.6521 -.6941 -.6329 -.6425 -.5880
 .897 -.5588 -.5817 -.6257 -.6818 -.6330 -.5863
 .926 -.5529 -.5524 -.6329 -.6851 -.6221 -.5787

ALPHA (1) = -4.354 BETA (2) = 600.05 P = 550.40 RN/L = 3.0174

SECTION : 1:IGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3172 .4120 .5070 .6020 .6970 .7920

X/CV
 .708 -.6637 -.6553 -.6933 -.5925 -.6595 -.6093
 .757 -.6576 -.6518 -.6593 -.6329 -.0000 -.5968
 .805 -.6557 -.6521 -.6941 -.6329 -.6425 -.5880
 .897 -.5588 -.5817 -.6257 -.6818 -.6330 -.5863
 .926 -.5529 -.5524 -.6329 -.6851 -.6221 -.5787

ALPHA (1) = -4.354 BETA (2) = 600.05 P = 550.40 RN/L = 3.0174

X/CV
 .708 -.6637 -.6553 -.6933 -.5925 -.6595 -.6093
 .757 -.6576 -.6518 -.6593 -.6329 -.0000 -.5968
 .805 -.6557 -.6521 -.6941 -.6329 -.6425 -.5880
 .897 -.5588 -.5817 -.6257 -.6818 -.6330 -.5863
 .926 -.5529 -.5524 -.6329 -.6851 -.6221 -.5787

ALPHA (1) = -4.354 BETA (2) = 600.05 P = 550.40 RN/L = 3.0174

X/CV
 .708 -.6637 -.6553 -.6933 -.5925 -.6595 -.6093
 .757 -.6576 -.6518 -.6593 -.6329 -.0000 -.5968
 .805 -.6557 -.6521 -.6941 -.6329 -.6425 -.5880
 .897 -.5588 -.5817 -.6257 -.6818 -.6330 -.5863
 .926 -.5529 -.5524 -.6329 -.6851 -.6221 -.5787

ALPHA (1) = -4.354 BETA (2) = 600.05 P = 550.40 RN/L = 3.0174

X/CV
 .708 -.6637 -.6553 -.6933 -.5925 -.6595 -.6093
 .757 -.6576 -.6518 -.6593 -.6329 -.0000 -.5968
 .805 -.6557 -.6521 -.6941 -.6329 -.6425 -.5880
 .897 -.5588 -.5817 -.6257 -.6818 -.6330 -.5863
 .926 -.5529 -.5524 -.6329 -.6851 -.6221 -.5787

ALPHA (1) = -4.354 BETA (2) = 600.05 P = 550.40 RN/L = 3.0174

X/CV
 .708 -.6637 -.6553 -.6933 -.5925 -.6595 -.6093
 .757 -.6576 -.6518 -.6593 -.6329 -.0000 -.5968
 .805 -.6557 -.6521 -.6941 -.6329 -.6425 -.5880
 .897 -.5588 -.5817 -.6257 -.6818 -.6330 -.5863
 .926 -.5529 -.5524 -.6329 -.6851 -.6221 -.5787

ALPHA (1) = -4.354 BETA (2) = 600.05 P = 550.40 RN/L = 3.0174

DATE 16 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

$\alpha_{\text{PHA}} (2) = - .032 \quad \text{BETA} (1) = - 3.867 \quad \text{MACH} = 1.2476 \quad 0 = 600.19 \quad P = 550.87 \quad RN/L = 3.0137$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X

.708	- .5962	- .6715	- .6842	- .6892	- .6703	- .6426
.757	- .5597	- .6709	- .6885	- .6873	.0000	- .6258
.805	- .6604	- .6739	- .6944	- .6890	.6630	- .6124
.887	- .6516	- .6918	- .6958	- .6894	.6589	- .6106
.958	- .6420	- .6253	- .6255	- .6866	.6506	- .6037

$\alpha_{\text{PHA}} (2) = - .029 \quad \text{BETA} (2) = - 184 \quad \text{MACH} = 1.2476 \quad 0 = 600.19 \quad P = 550.87 \quad RN/L = 3.0137$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X

.709	- .6772	- .6595	- .6736	- .6773	- .6613	- .6210
.757	- .6529	- .6598	- .6804	- .6764	.0000	- .6052
.805	- .6453	- .6536	- .6816	- .6849	.6773	- .5924
.887	- .6509	- .6762	- .6599	- .6769	.6476	- .5931
.958	- .6476	- .6802	- .6849	- .6797	.6405	- .5848

$\alpha_{\text{PH-A}} (2) = - .035 \quad \text{BETA} (3) = - 4.251 \quad \text{MACH} = 1.2476 \quad 0 = 600.19 \quad P = 550.87 \quad RN/L = 3.0137$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X

.708	- .6755	- .5710	- .6859	- .6880	- .5722	- .6193
.757	- .6525	- .6710	- .6916	- .6909	.0000	- .6003
.805	- .6516	- .6739	- .6958	- .6839	.6549	- .5921
.887	- .6525	- .6831	- .7005	- .6887	.6457	- .5928
.958	- .6550	- .6915	- .6935	- .6935	.6431	- .5835

$\alpha_{\text{PHA}} (3) = 3.925 \quad \text{BETA} (1) = - 3.871 \quad \text{MACH} = 1.2463 \quad 0 = 600.19 \quad P = 550.87 \quad RN/L = 3.0145$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY X

.709	- .6975	- .5943	- .6320	- .7032	- .6974	- .6491
.757	- .6756	- .6858	- .7227	- .7016	.6000	- .6365
.805	- .6532	- .5972	- .7256	- .7032	.6772	- .6238
.887	- .6712	- .6955	- .7084	- .7051	.6727	- .6198
.958	- .6521	- .7211	- .7070	- .7042	.6763	- .6141

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE
 SECTION 1: LEFT HAND INSIDE

SECTION 1: LEFT HAND INSIDE

ALPHA (3) = 3.924 BETA (2) = .180 MACH = 1.2463 O = 599.48 P = 551.33 RN/L = 3.0145

SECTION 1: LEFT HAND INSIDE

ALPHA (3) = 3.934 BETA (3) = 4.244 MACH = 1.2463 O = 599.48 P = 551.33 RN/L = 3.0145

SECTION 1: LEFT HAND INSIDE

ALPHA (4) = 7.933 BETA (1) = -3.865 MACH = 1.2474 O = 600.07 P = 550.87 RN/L = 3.0133

SECTION 1: LEFT HAND INSIDE

ALPHA (4) = 7.987 BETA (2) = .196 MACH = 1.2474 O = 600.07 P = 550.87 RN/L = 3.0133

SECTION 1: LEFT HAND INSIDE

(XEBK34)

Y/CV

Z/EV

DATE 14 FEB 76

TASULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C/R ORB SPEED BRAKE

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (41) = 11.928 BETA (31) = 4.237 MACH = 1.2474 0 = 600.07 P = 550.87 RN/L = 3.0135

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (51) = 11.921 BETA (11) = -3.850 MACH = 1.2455 0 = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (51) = 11.932 BETA (21) = 1.189 MACH = 1.2455 0 = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (51) = 11.924 BETA (31) = 4.253 MACH = 1.2455 0 = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (51) = 11.926 BETA (31) = 4.256 MACH = 1.2455 0 = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (51) = 11.928 BETA (31) = 4.258 MACH = 1.2455 0 = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (51) = 11.930 BETA (31) = 4.260 MACH = 1.2455 0 = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY

(X/E8K34)

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

PAGE E-5B

DATE 1. FEB 76 TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R ORB SPEED BRAKE (XEBK35)						
ALPHA + 21 =	- .323	BETA (1) =	- 3.853	MACH =	1.0993	P =
SECTION : 1. WRIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	-.8138	-.7954	-.8098	-.8175	-.8029	-.7625
.757	-.7817	-.7673	-.8175	-.8201	.0000	-.7461
.805	-.7824	-.7659	-.8279	-.8201	-.7930	-.7346
.857	-.7823	-.7632	-.8323	-.8187	-.7873	-.7269
.883	-.6854	-.6826	-.8270	-.8112	-.7872	-.7210
ALPHA + 21 =	- .023	BETA (2) =	- 1.95	MACH =	1.0993	O =
SECTION : 1. WRIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	-.8073	-.7947	-.8054	-.8141	-.8002	-.7576
.757	-.7874	-.7631	-.8113	-.8163	.0000	-.7382
.805	-.7853	-.7632	-.8217	-.8157	-.7850	-.7332
.857	-.7745	-.7575	-.8302	-.8157	-.7917	-.7277
.883	-.5925	-.8168	-.8302	-.8044	-.7813	-.7267
ALPHA + 21 =	- .024	BETA (3) =	- 4.259	MACH =	1.0993	O =
SECTION : 1. WRIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	-.7820	-.7820	-.7973	-.8100	-.7924	-.7364
.757	-.7721	-.7924	-.8202	-.8133	.0000	-.7135
.805	-.7718	-.7929	-.8228	-.8180	-.7769	-.7076
.857	-.7631	-.7927	-.8312	-.8124	-.7743	-.7033
.883	-.6523	-.8165	-.8261	-.7934	-.7726	-.6913
ALPHA + 21 =	3.352	BETA (4) =	- 3.863	MACH =	1.0983	O =
SECTION : 1. WRIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	-.7784	-.7820	-.8291	-.8145	-.7923	-.7494
.757	-.7705	-.7821	-.8202	-.8164	.0000	-.7225
.805	-.7696	-.7823	-.8223	-.8162	-.7735	-.7203
.857	-.7636	-.7826	-.8348	-.8192	-.7771	-.7157
.883	-.6593	-.8148	-.8349	-.7952	-.7751	-.7397

DATE 11-07-68

TABLED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE (XEBK35)									
ALPHA (3) = 2.352	BETA (2) = .133	MACH = 1.0983	Q = 598.70	P = 598.70	R = 709.06	RNL = 3.1785			
SECTION 1: FLIGHT BASIC INSIDE		DEPENDENT VARIABLE CP							
2.3V	.3170	.4120	.5070	.6020	.6970	.7920			
A.01									
1.758	-1.788	-1.794	-1.803	-1.815	-1.829	-1.840			
1.762	-1.786	-1.795	-1.806	-1.816	-1.826	-1.836			
1.766	-1.789	-1.798	-1.809	-1.820	-1.830	-1.840			
1.770	-1.791	-1.800	-1.811	-1.821	-1.831	-1.841			
1.774	-1.795	-1.804	-1.815	-1.825	-1.835	-1.845			
1.778	-1.803	-1.812	-1.823	-1.833	-1.843	-1.853			
ALPHA = 3.0 = 3.032	BETA (3) = 4.243	MACH = 1.0983	Q = 598.70	P = 598.70	R = 709.06	RNL = 3.1785			
SECTION 1: FLIGHT BASIC INSIDE		DEPENDENT VARIABLE CP							
2.3U	.3170	.4120	.5070	.6020	.6970	.7920			
A.01									
1.759	-1.789	-1.794	-1.804	-1.814	-1.824	-1.834			
1.763	-1.792	-1.802	-1.812	-1.822	-1.832	-1.842			
1.767	-1.796	-1.806	-1.816	-1.826	-1.836	-1.846			
1.771	-1.800	-1.810	-1.820	-1.830	-1.840	-1.850			
1.775	-1.804	-1.814	-1.824	-1.834	-1.844	-1.854			
1.779	-1.808	-1.818	-1.828	-1.838	-1.848	-1.858			
ALPHA = 4.0 = 4.032	BETA (1) = -3.862	MACH = 1.0987	Q = 598.57	P = 598.57	R = 708.35	RNL = 3.1769			
SECTION 1: FLIGHT BASIC INSIDE		DEPENDENT VARIABLE CP							
2.3V	.3170	.4120	.5070	.6020	.6970	.7920			
A.01									
1.759	-1.789	-1.794	-1.817	-1.820	-1.822	-1.801			
1.763	-1.792	-1.802	-1.823	-1.825	-1.826	-1.803			
1.767	-1.796	-1.806	-1.832	-1.824	-1.823	-1.824			
1.771	-1.800	-1.810	-1.835	-1.819	-1.818	-1.819			
1.775	-1.804	-1.814	-1.838	-1.823	-1.823	-1.824			
1.779	-1.808	-1.818	-1.845	-1.835	-1.835	-1.836			
ALPHA = 5.0 = 5.032	BETA (2) = .153	MACH = 1.0987	Q = 598.57	P = 598.57	R = 708.35	RNL = 3.1769			
SECTION 1: FLIGHT BASIC INSIDE		DEPENDENT VARIABLE CP							
2.3W	.3170	.4120	.5070	.6020	.6970	.7920			
A.01									
1.759	-1.789	-1.794	-1.811	-1.801	-1.796	-1.797			
1.763	-1.792	-1.802	-1.829	-1.825	-1.826	-1.825			
1.767	-1.796	-1.806	-1.839	-1.828	-1.828	-1.829			
1.771	-1.800	-1.810	-1.846	-1.833	-1.833	-1.834			
1.775	-1.804	-1.814	-1.853	-1.832	-1.832	-1.833			
1.779	-1.808	-1.818	-1.880	-1.833	-1.833	-1.834			

AIRCRAFT PRESSURE DATA - 04148 (AMES 11-073-1)

(XE6435)

AIRCRAFT 11-0731041481 - 140A/B/C/R O&B SPEED BRAKE

DEPENDENT VARIABLE CP

SECTION 1 : FLIGHT PHASE INSIDE

P/NL = 3.1759

SECTION 1 : FLIGHT PHASE INSIDE

P/NL = 3.1753

SECTION 1 : FLIGHT PHASE INSIDE

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SECTION 1 : FLIGHT PHASE INSIDE

P/NL = 3.1753

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DATE 14 FEB 78

FABULATED PRESSURE DATA - 3A148 (AMES 11-073-1)

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AMES 11-07310(A148) - 140A/B/C/R CRB SPEED BRAKE

(XEBK36)

ALPHA (2) = .342 BETA (1) = -3.865 MACH = .90027 O = 600.16 P = 1057.8 RNL = 3.5774

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5932 -.5135 -.6731 -.6412 -.5708 -.4621
.577 -.5621 -.6622 -.6917 -.6511 .0000 -.4451
.805 -.5931 -.5446 -.6919 -.6495 -.5594 -.1246
.697 -.6212 -.7047 -.6372 -.5293 -.4231
.563 -.5657 -.7059 -.6516 -.5243 -.4144

ALPHA (2) = .392 BETA (2) = .183 MACH = .90027 O = 600.16 P = 1057.8 RNL = 3.5774

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CF -.5393 -.5504 -.5998 -.6090 -.5684 -.4968
.757 -.5233 -.5541 -.6161 -.6126 -.0000 -.4585
.805 -.5363 -.5712 -.6320 -.6159 -.5545 -.4488
.281 -.6577 -.6575 -.6599 -.6131 -.5377 -.4318
.568 -.5726 -.6510 -.6529 -.6137 -.5223 -.4273

ALPHA (2) = .085 BETA (3) = 4.248 MACH = .90027 O = 600.16 P = 1057.8 RNL = 3.5774

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CF -.5232 -.5521 -.5935 -.6065 -.5467 -.4184
.757 -.5239 -.5563 -.6333 -.5199 .0000 -.4040
.805 -.5695 -.5776 -.66562 -.6321 -.5304 -.3926
.697 -.6525 -.6213 -.6683 -.6122 -.5030 -.3878
.568 -.6573 -.6625 -.6678 -.6054 -.4919 -.3644

ALPHA (3) = 3.373 BETA (1) = -3.873 MACH = .89927 O = 599.29 P = 1058.5 RNL = 3.5740

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CF -.5246 -.6128 -.6628 -.6011 -.5223 -.4126
.757 -.5251 -.6116 -.6623 -.6070 .0000 -.4017
.805 -.5255 -.6113 -.6622 -.6035 -.4937 -.3955
.697 -.6137 -.5715 -.6612 -.5212 -.4935 -.3698
.568 -.6206 -.5612 -.6617 -.5194 -.4934 -.3953

DATE 11-073-76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - (140A/B/C/R ORB SPEED BRAKE SECTION 1; RIGHT HAND INSIDE							PAGE 6313
DEPENDENT VARIABLE CP							(XEBK36)
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CPV	.708	-.5212	-.5479	-.5985	-.6036	-.5473	-.4714
	.757	-.5189	-.5511	-.6054	-.6099	-.0000	-.4464
	.905	-.5259	-.5641	-.6333	-.6135	-.5327	-.4272
	.297	-.5472	-.6129	-.6407	-.6059	-.5178	-.4195
	.368	-.5556	-.6313	-.6452	-.5936	-.4925	-.4029
ALPHA4 (3) = 3.985 BETA4 (3) = 4.242 MACH = .89927							P = 1058.5 RN/L = 3.5740
SECTION 1; RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CPV	.718	-.5130	-.5473	-.5629	-.5996	-.5345	-.3987
	.757	-.5295	-.5457	-.5326	-.6164	.0900	-.3821
	.85	-.5305	-.5572	-.6477	-.6271	-.5134	-.3679
	.367	-.5315	-.5615	-.5531	-.6263	-.3979	-.3595
	.299	-.5315	-.5615	-.6453	-.6533	-.4745	-.3442
ALPHA4 (4) = 9.352 BETA4 (4) = -3.662 MACH = .89970							P = 1058.7 RN/L = 3.5781
SECTION 1; RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CPV	.718	-.5329	-.5456	-.5634	-.6116	-.5375	-.4305
	.757	-.5693	-.5837	-.6637	-.6197	.0000	-.4150
	.85	-.5693	-.5837	-.6637	-.6235	-.5078	-.3932
	.367	-.5693	-.5837	-.6637	-.6222	-.4388	-.3252
	.299	-.5693	-.5837	-.6637	-.6234	-.4971	-.3874
ALPHA4 (4) = 9.354 BETA4 (4) = 1.84 MACH = .89970							P = 1058.7 RN/L = 3.5781
SECTION 1; RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/EV	.3170	.4120	.5070	.6020	.6970	.7920	
X/CPV	.718	-.5329	-.5456	-.5634	-.6116	-.5375	-.4305
	.757	-.5693	-.5837	-.6637	-.6197	.0000	-.4150
	.85	-.5693	-.5837	-.6637	-.6235	-.5078	-.3932
	.367	-.5693	-.5837	-.6637	-.6222	-.4388	-.3252
	.299	-.5693	-.5837	-.6637	-.6234	-.4971	-.3874

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

PAGE 6314

ALPHA : 51 = 11.931		BETA : 31 = 4.239	MACH = .89970	O = 599.92	P = 1058.7	RNL = 3.5781	(XEBK36)
SECTION : 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY							
.758	-.5302	-.5220	-.6175	-.6009	-.5613	-.3780	
.757	-.5257	-.5369	-.5369	-.6241	-.6241	-.3648	
.695	-.5278	-.5548	-.6524	-.6328	-.5033	-.3577	
.887	-.5391	-.6125	-.6842	-.6136	-.4837	-.3725	
.568	-.5327	-.6525	-.6521	-.6196	-.4691	-.3552	
ALPHA : 51 = 11.931	BETA : 11 = -3.854	MACH = .89977	O = 600.28	P = 1059.2	RNL = 3.5829		
SECTION : 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY							
.758	-.6170	-.6396	-.6839	-.6376	-.5644	-.4412	
.757	-.6123	-.5933	-.6401	-.6458	-.6000	-.4294	
.857	-.6221	-.6759	-.7050	-.6837	-.5304	-.4112	
.887	-.6353	-.7056	-.7147	-.6399	-.5214	-.4140	
.568	-.6311	-.7156	-.7156	-.6255	-.5222	-.4121	
ALPHA : 51 = 11.931	BETA : 21 = .138	MACH = .85377	O = 600.28	P = 1059.2	RNL = 3.5829		
SECTION : 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY							
.758	-.5526	-.5653	-.6425	-.6234	-.5779	-.4500	
.757	-.5636	-.6367	-.6367	-.6367	-.6367	-.4332	
.857	-.6311	-.6324	-.6524	-.6524	-.5496	-.4245	
.887	-.6222	-.6517	-.6517	-.6517	-.6253	-.4150	
.568	-.5922	-.6305	-.6305	-.6305	-.5333	-.3984	
ALPHA : 51 = 11.935	BETA : 31 = 4.259	MACH = .89977	O = 600.28	P = 1059.2	RNL = 3.5829		
SECTION : 1) RIGHT HAND INSIDE							
DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY							
.758	-.5261	-.5832	-.6397	-.6170	-.5708	-.4148	
.757	-.5251	-.5832	-.6397	-.6170	-.5708	-.4148	
.856	-.6264	-.6357	-.6652	-.6277	-.5257	-.3969	
.886	-.6255	-.6357	-.6652	-.6277	-.5257	-.3979	
.568	-.5916	-.6335	-.6335	-.6335	-.5219	-.3743	

DATE 14 FEB 75

TABULATED PRESSURE DATA - CA14B (AMES 11-073-1)

AMES 11-073(CA14B) -140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA
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REFERENCE DATA

SREF	2630.0000 SQ.FT.	XMRP	1076.6800 IN. X0	RUDDER = 10.000	SPDRK = 35.000
LREF	.47.4000 IN.	YMRP	.0000 IN. Y0	BDFLAP = 16.300	L-ELVN = .000
EREF	.636.4582 IN.	ZMRP	375.0000 IN. Z0	R-ELVN = 10.000	MACH = .600
ANGLE (1) = -4.041	BETA (1) = -7.848	MACH = .59694	0 = 595.14	P = 2385.8	RNL = 4.8726
SECTION (1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP				
Z/EV	.3170 .4120	.5070	.6020 .6970 .7920		
X/EV					
.723	-8193	-5730	-6395	-5912	-4225 -.2786
.757	-8161	-6842	-6931	-5910	.0000 -.2821
.805	-8132	-7183	-7012	-5893	-4038 -.2935
.897	-8121	-7341	-7195	-6054	-4100 -.3151
.353	-8124	-7268	-7231	-6314	-4249 -.3452
ANGLE (1) = -7.025	BETA (2) = -3.846	MACH = .59694	0 = 595.14	P = 2385.8	RNL = 4.8726
SECTION (1) B.C-T HAND INSIDE	DEPENDENT VARIABLE CP				
Z/EV	.3170 .4120	.5070	.6020 .6970 .7920		
X/EV					
.729	-5473	-5830	-6391	-5733	-4698 -.3124
.757	-5523	-5939	-6510	-5735	.0000 -.3050
.805	-5583	-6253	-6595	-5792	-4414 -.3157
.897	-5636	-6632	-6676	-6516	-4263 -.3020
.353	-5639	-6693	-6777	-5958	-4263 -.3049
ANGLE (1) = -3.935	BETA (3) = .184	MACH = .59694	0 = 595.14	P = 2385.8	RNL = 4.8726
SECTION (1) B.C-T HAND INSIDE	DEPENDENT VARIABLE CP				
Z/EV	.3170 .4120	.5070	.6020 .6970 .7920		
X/EV					
.723	-5534	-5518	-5575	-5559	-4602 -.3134
.757	-5576	-5516	-5522	-5554	.0000 -.3039
.805	-5613	-5583	-5425	-5723	-4224 -.2958
.897	-5669	-5548	-5513	-4072	-4072 -.2999
.353	-5676	-5577	-5571	-5575	-3911 -.2913

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TABULATED PRESSURE DATA - OA149 (AMES 11-073-1)

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AMES 11-073 (OA149) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (1) = -3.930 BETA (4) = 4.266 MACH = .59694 0 = 595.14 P = 2385.8 RN/L = 4.8726

SECTION 1 (RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-4.622	-.5155	-.5801	-.5311	-.4275	-.3093
.757	-4.652	-.5191	-.6002	-.5431	-.0075	-.3074
.805	-5.031	-.5543	-.6189	-.5431	-.4012	-.2942
.897	-5.287	-.6069	-.6258	-.5131	-.3925	-.2921
.950	-5.395	-.6310	-.6348	-.5036	-.3690	-.2895

ALPHA (1) = -3.945 BETA (5) = 8.339 MACH = .59694 0 = 595.14 P = 2385.8 RN/L = 4.8726

SECTION 1 (RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-5.095	-.5629	-.6276	-.5382	-.3724	-.2372
.757	-5.116	-.5562	-.6442	-.5523	-.0300	-.2370
.805	-5.399	-.5989	-.6581	-.5363	-.3494	-.2538
.897	-5.575	-.6662	-.6795	-.5083	-.3278	-.2578
.950	-5.925	-.6769	-.6762	-.5050	-.3017	-.2531

ALPHA (2) = .030 BETA (1) = -7.899 MACH = .59652 0 = 594.31 P = 2385.8 RN/L = 4.8794

SECTION 1 (RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-6.324	-.5791	-.7108	-.6054	-.4477	-.2805
.757	-6.325	-.6959	-.7015	-.6049	-.0050	-.2825
.805	-6.593	-.7235	-.7094	-.5982	-.4270	-.2839
.897	-6.833	-.7341	-.7241	-.6275	-.4313	-.3058
.950	-7.611	-.7336	-.7300	-.6543	-.4225	-.3328

ALPHA (2) = .030 BETA (2) = -3.853 MACH = .59652 0 = 594.31 P = 2385.8 RN/L = 4.8794

SECTION 1 (RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-5.592	-.5981	-.6412	-.5709	-.4645	-.2932
.757	-5.593	-.5982	-.6483	-.5765	-.0553	-.3130
.805	-5.763	-.6456	-.6559	-.5823	-.4335	-.2930
.897	-5.952	-.6635	-.6592	-.5804	-.4295	-.3018
.950	-6.119	-.6670	-.6576	-.5839	-.4372	-.3179

ALPHA (3) = -.041 BETA (2) = -3.867 MACH = .59620 0 = 593.73 P = 2386.0 RN/L = 4.8840

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.729	-.5723	-.6075	-.5683	-.5682	-.4332	-.2766
.751	-.5553	-.5105	-.5609	-.5711	-.0000	-.2638
.785	-.6053	-.5528	-.6771	-.5737	-.4031	-.2721
.825	-.6039	-.6738	-.5764	-.5808	-.4142	-.2868
.867	-.6297	-.5816	-.6793	-.5825	-.4171	-.3094

ALPHA (3) = .31 = 4.340 BETA (3) = 1.86 MACH = .59620 0 = 593.73 P = 2386.0 RN/L = 4.8840

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.759	-.5116	-.5616	-.5121	-.5681	-.4501	-.2831
.787	-.5126	-.5667	-.6330	-.5712	.0000	-.2800
.825	-.6363	-.5645	-.6335	-.5691	-.4133	-.2812
.867	-.5633	-.6403	-.6472	-.5551	-.324	-.2655
.908	-.5633	-.6553	-.6557	-.5610	-.3798	-.2716

ALPHA (2) = 4.340 BETA (4) = 4.237 MACH = .59620 0 = 593.73 P = 2386.0 RN/L = 4.8840

SECTION : 1:LEFT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.759	-.6357	-.5515	-.6997	-.5680	-.4276	-.2230
.787	-.5246	-.5594	-.5694	-.5726	-.0200	-.2245
.825	-.5241	-.5805	-.5726	-.3756	-.2067	-.2067
.867	-.5710	-.5810	-.5573	-.3535	-.2181	-.2181
.908	-.5924	-.6938	-.5600	-.3443	-.2214	-.2214

ALPHA (2) = 4.340 BETA (5) = 5.284 MACH = .59620 0 = 593.73 P = 2386.0 RN/L = 4.8840

SECTION : 1:LEFT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.759	-.6142	-.5524	-.7634	-.5242	-.3788	-.1810
.787	-.5156	-.5311	-.6311	-.6311	-.0200	-.1810
.825	-.5156	-.7893	-.6178	-.3368	-.1788	-.1788
.867	-.5655	-.8022	-.5073	-.3247	-.1805	-.1805
.908	-.5655	-.7721	-.5635	-.3161	-.1935	-.1935

DATE 1-17-78

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE
 $\alpha_{\text{P-B}}(1) = 7.372 \quad \beta_{\text{TA}}(1) = -7.834 \quad MACH = .59666 \quad 0 = 594.55 \quad P = 2385.8 \quad RN/L = 4.8889$

SECTION 1 - RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z: 3170 .4120 .5070 .6020 .6970 .7920

X/CN

.758 - .5350 - .6953 - .6914 - .5351 - .3742 - .2928
 .757 - .5284 - .6880 - .6348 - .0000 - .2918
 .755 - .5177 - .7265 - .7002 - .5267 - .3692 - .2970
 .757 - .5722 - .427 - .7073 - .5674 - .3966 - .2998
 .758 - .5869 - .7394 - .6807 - .6082 - .4244 - .3342

$\alpha_{\text{P-B}}(4) = 7.984 \quad \beta_{\text{TA}}(2) = -3.864 \quad MACH = .59666 \quad 0 = 594.55 \quad P = 2385.8 \quad RN/L = 4.8889$

SECTION 1 - RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z: 3170 .4120 .5070 .6020 .6970 .7920

X/CN

.758 - .5742 - .6189 - .6501 - .5461 - .4055 - .2723
 .757 - .6247 - .6256 - .6584 - .5477 - .4000 - .2794
 .756 - .6554 - .6556 - .6572 - .5534 - .3965 - .2735
 .757 - .6833 - .6725 - .6712 - .5644 - .3935 - .2805
 .758 - .6224 - .6707 - .6584 - .5708 - .3938 - .2913

$\alpha_{\text{P-B}}(4) = 7.925 \quad \beta_{\text{TA}}(3) = .171 \quad MACH = .59666 \quad 0 = 594.55 \quad P = 2385.8 \quad RN/L = 4.8889$

SECTION 1 - RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z: 3170 .4120 .5070 .6020 .6970 .7920

X/CN

.758 - .5030 - .5513 - .5108 - .5534 - .4456 - .2797
 .757 - .5150 - .5555 - .6332 - .5736 - .4500 - .2733
 .755 - .5275 - .5254 - .6195 - .5627 - .4041 - .2666
 .757 - .5383 - .6391 - .5525 - .5533 - .3889 - .2651
 .758 - .5742 - .5537 - .5535 - .5531 - .3642 - .2543

$\alpha_{\text{P-B}}(4) = 7.897 \quad \beta_{\text{TA}}(4) = 4.234 \quad MACH = .59666 \quad 0 = 594.55 \quad P = 2385.8 \quad RN/L = 4.8889$

SECTION 1 - RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z: 3170 .4120 .5070 .6020 .6970 .7920

X/CN

.758 - .5029 - .5615 - .6254 - .5556 - .4134 - .2360
 .757 - .5126 - .5605 - .6531 - .5763 - .4000 - .2367
 .755 - .5237 - .5637 - .6548 - .5549 - .3577 - .2244
 .757 - .5346 - .5636 - .6562 - .5442 - .3459 - .2190
 .758 - .5742 - .5683 - .6793 - .5540 - .3222 - .2292

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11-073-1

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6321

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

MACH = 4.243

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DEPENDENT VARIABLE CP

(XEBK37)

SECTION: 11:120 11:120 11:120 11:120

BETTA (4) = .5070 .6020 .6970 .7920

P = 2385.8

RNL = 4.8898

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DEPENDENT VARIABLE CP

(XEBK37)

SECTION: 11:120 11:120 11:120 11:120

BETTA (5) = .5070 .6020 .6970 .7920

P = 2385.8

RNL = 4.8898

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DEPENDENT VARIABLE CP

(XEBK37)

SECTION: 11:120 11:120 11:120 11:120

BETTA (6) = .5070 .6020 .6970 .7920

P = 2385.8

RNL = 4.8898

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DATE 14 AUG 76

TABULATED PRESSURE DATA - CA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

(XEBK30) (13 AUG 75)

REFERENCE DATA

XREF =	2FGD,CCDC SQ.FT.	XMRP =	1076.6800 IN. X0
ZREF =	.774,6000 IN.	YMRP =	.0000 IN. Y0
ZREF =	.925,0500 IN.	ZMRP =	.375,0000 IN. Z0
SCALE =	.C300		

ALPHA (1) = -4.302 BETA (1) = -3.853 MACH = 1.3931 Q = 600.20 P = 441.83 RNL = 2.9112

SECTION 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

2/24 .3170 .4120 .5070 .6020 .6970 .7920

X/CV = .5348 -.5301 -.5947 -.5998 -.5956 -.5793

.557 -.5824 -.5372 -.5975 -.6010 .0000 -.5762

.605 -.5625 -.5872 -.5989 -.6015 -.5954 -.5786

.697 -.5628 -.5928 -.6010 -.6027 -.5958 -.5791

.698 -.5642 -.5971 -.6008 -.6032 -.5956 -.5791

ALPHA (1) = -3.940 BETA (2) = .193 MACH = 1.3931 Q = 600.20 P = 441.83 RNL = 2.9112

SECTION 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

2/24 .3170 .4120 .5070 .6020 .6970 .7920

X/CV = .5376 -.5090 -.5155 -.6226 -.6162 -.5928

.557 -.5333 -.5054 -.6195 -.6205 .0000 -.5897

.605 -.5524 -.6274 -.6219 -.6247 -.6138 -.5914

.647 -.5562 -.5113 -.6235 -.6249 -.6124 -.5899

.698 -.6322 -.6153 -.6249 -.6219 -.6093 -.5873

ALPHA (1) = -3.950 BETA (3) = 4.276 MACH = 1.3931 Q = 600.20 P = 441.83 RNL = 2.9112

SECTION 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

2/24 .3170 .4120 .5070 .6020 .6970 .7920

X/CV = .5523 -.6223 -.6294 -.6351 -.6247 -.6043

.557 -.5162 -.5111 -.6358 -.6372 .0000 -.6003

.605 -.5214 -.5117 -.6382 -.6363 -.6202 -.5977

.681 -.5256 -.5136 -.6328 -.6323 -.6176 -.5924

.698 -.5359 -.5178 -.6352 -.6353 -.6150 -.5841

TABLED PRESSURE DATA - OAI14B / ANES 11-073-1

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AMES 11-073(OAI14B) -140A/B/C/R ORB SPEED BRAKE
SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

(XLBK39)

Z-3V .3170 .4120 .5070 .6020 .6970 .7920

X-CG

	$\alpha_{\text{PLA}} = 21^\circ$	$\beta_{\text{ETA}} = 1^\circ$	$\gamma_{\text{MACH}} = -3.859$	$\text{MACH} = 1.3931$	$Q = 599.59$	$P = 441.36$	$RN/L = 2.9073$
1	-1.6144	-1.5024	-1.6058	-1.6096	-1.6054	-1.5935	
2	-1.5322	-1.5393	-1.6085	-1.6115	-1.6000	-1.5904	
3	-1.5355	-1.5395	-1.6095	-1.6113	-1.6056	-1.5926	
4	-1.5345	-1.5299	-1.6108	-1.6120	-1.6063	-1.5895	
5	-1.5351	-1.6015	-1.6118	-1.6118	-1.6054	-1.5854	

 $\alpha_{\text{PLA}} = 21^\circ = \beta_{\text{ETA}} = 21^\circ = 1.18^\circ$ MACH = 1.3931 Q = 599.59 P = 441.36 RN/L = 2.9073

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-3V .3170 .4120 .5070 .6020 .6970 .7920

X-CG

	$\alpha_{\text{PLA}} = 21^\circ$	$\beta_{\text{ETA}} = 31^\circ$	$\gamma_{\text{MACH}} = 4.255$	$\text{MACH} = 1.3931$	$Q = 599.59$	$P = 441.36$	$RN/L = 2.9073$
1	-1.6107	-1.6157	-1.6216	-1.6169	-1.5992		
2	-1.5983	-1.6093	-1.6238	-1.6238	.0000	-1.5942	
3	-1.6027	-1.6209	-1.6240	-1.6145		-1.5953	
4	-1.6153	-1.6221	-1.6238	-1.6129		-1.5970	
5	-1.6159	-1.6233	-1.6226	-1.6105		-1.5944	

 $\alpha_{\text{PLA}} = 21^\circ = 31^\circ = \beta_{\text{ETA}} = 11^\circ = -3.872$ MACH = 1.3931 Q = 599.59 P = 441.36 RN/L = 2.9073

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-3V .3170 .4120 .5070 .6020 .6970 .7920

X-CG

	$\alpha_{\text{PLA}} = 21^\circ$	$\beta_{\text{ETA}} = 11^\circ$	$\gamma_{\text{MACH}} = 1.3931$	$Q = 599.59$	$P = 441.36$	$RN/L = 2.9073$
1	-1.6575	-1.6266	-1.6334	-1.6261	-1.6074	
2	-1.5155	-1.6195	-1.6329	-1.6319	.0000	-1.6039
3	-1.5211	-1.6214	-1.6342	-1.6242		-1.6026
4	-1.6260	-1.6277	-1.6355	-1.6313		-1.5964
5	-1.6118	-1.6350	-1.6356	-1.6275		-1.5844

 $\alpha_{\text{PLA}} = 21^\circ = 31^\circ = \beta_{\text{ETA}} = 11^\circ = -3.872$ MACH = 1.3931 Q = 599.59 P = 441.36 RN/L = 2.9073

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-3V .3170 .4120 .5070 .6020 .6970 .7920

X-CG

	$\alpha_{\text{PLA}} = 21^\circ$	$\beta_{\text{ETA}} = 11^\circ$	$\gamma_{\text{MACH}} = 1.3931$	$Q = 599.70$	$P = 441.36$	$RN/L = 2.9108$
1	-1.6223	-1.6254	-1.6127	-1.6188	-1.6115	-1.5900
2	-1.5374	-1.6226	-1.6155	-1.6239	.0000	-1.5900
3	-1.5295	-1.6225	-1.6175	-1.6212		-1.5940
4	-1.5283	-1.6242	-1.6197	-1.6239		-1.5943
5	-1.6222	-1.6163	-1.6207	-1.6233		-1.5933

DATE 14 FEB 76

TASULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -1140A/B/C/R ORB SPEED BRAKE
(XEBK38)

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ALPHA (3) = 2.855 BETA (2) = .183 MACH = 1.3932 0 = 599.70 P = 441.36 RNL = 2.9108

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6295	-.6074	-.6129	-.6181	-.6136	-.5961
.757	-.5935	-.6051	-.6155	-.6203	-.0000	-.5917
.805	-.5992	-.6248	-.6174	-.6205	-.6122	-.5935
.887	-.6041	-.6091	-.6164	-.6203	-.6113	-.5942
.958	-.6008	-.6103	-.6198	-.6203	-.6094	-.5921

ALPHA (3) = 3.906 BETA (3) = 4.246 MACH = 1.3932 0 = 599.70 P = 441.36 RNL = 2.9108

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6560	-.6210	-.6273	-.6360	-.6296	-.6097
.757	-.6165	-.5191	-.6310	-.6374	-.0000	-.6052
.805	-.5154	-.6194	-.6332	-.6377	-.6261	-.6057
.887	-.6175	-.6229	-.6379	-.6360	-.6247	-.6014
.958	-.6118	-.6245	-.6372	-.6346	-.6239	-.5959

ALPHA (4) = 7.922 BETA (4) = -3.861 MACH = 1.3932 0 = 599.39 P = 441.12 RNL = 2.9102

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6371	-.6135	-.6197	-.6273	-.6197	-.5975
.757	-.6035	-.6121	-.6231	-.6294	-.0000	-.5973
.805	-.5625	-.6114	-.6252	-.6290	-.6200	-.5982
.887	-.6102	-.6149	-.6271	-.6287	-.6193	-.5978
.958	-.6037	-.6179	-.6290	-.6268	-.6181	-.5931

ALPHA (4) = 7.892 BETA (2) = .182 MACH = 1.3932 0 = 599.39 P = 441.12 RNL = 2.9102

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6213	-.6361	-.6127	-.6177	-.6120	-.5914
.757	-.5903	-.5030	-.6142	-.6198	-.0000	-.5889
.805	-.5269	-.5037	-.6160	-.6205	-.6115	-.5921
.887	-.5518	-.5033	-.6191	-.6201	-.6119	-.5882
.958	-.5259	-.5034	-.6201	-.6208	-.6101	-.5873

DATE 11-073-76

TABLED PRESSURE DATA - OPA4B (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE (XEBK38)						
$\alpha_{-P-2} + \beta_1 =$	7.830	BETA (3) =	4.245	MACH = 1.3932	Q = 599.39	P = 441.12
SECTION : 1 : RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z-8.	.3170	.4120	.5070	.6020	.5970	.7920
X-CY						
.753	-.6380	-.5056	-.6143	-.6203	-.6155	-.5980
.757	-.6021	-.5054	-.6169	-.6217	.0000	-.5954
.805	-.6026	-.5054	-.6179	-.6219	-.6150	-.5980
.837	-.6035	-.5056	-.6203	-.6231	-.6160	-.5980
.859	-.6032	-.6110	-.6214	-.6217	-.6150	-.5965
ALPHA (5) = 11.870 BETA (1) = -3.851 MACH = 1.3941	0	= 600.12	P	= 441.12	RNL	= 2.9072
SECTION : 1 : RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z-9.	.3170	.4120	.5070	.6020	.6970	.7920
X-CY						
.753	-.6397	-.6142	-.6217	-.6290	-.6238	-.6012
.757	-.6033	-.6136	-.6255	-.6305	.0000	-.5986
.805	-.6033	-.6123	-.6257	-.6305	-.6208	-.6000
.837	-.6104	-.6177	-.6268	-.6298	-.6201	-.6009
.859	-.6050	-.5210	-.6298	-.6299	-.6191	-.5948
ALPHA (5) = 11.890 BETA (2) = .167 MACH = 1.3941	0	= 600.12	P	= 441.12	RNL	= 2.9072
SECTION : 1 : RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z-9.	.3170	.4120	.5070	.6020	.6970	.7920
X-CY						
.753	-.6252	-.6154	-.6177	-.6214	-.6180	-.5955
.757	-.5945	-.6097	-.6154	-.6250	.0000	-.5946
.805	-.6298	-.6126	-.6220	-.6267	-.6149	-.5962
.837	-.6056	-.6113	-.6239	-.6270	-.6177	-.5971
.859	-.6035	-.6113	-.6257	-.6253	-.6175	-.5973
ALPHA (5) = 11.873 BETA (3) = 4.255 MACH = 1.3941	0	= 600.12	P	= 441.12	RNL	= 2.9072
SECTION : 1 : RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z-3.	.3170	.4120	.5070	.5020	.6970	.7920
X-CY						
.753	-.5514	-.5075	-.5125	-.5158	-.6120	-.5985
.757	-.5922	-.5052	-.5144	-.6153	-.6130	-.5964
.805	-.5616	-.5042	-.5141	-.6172	-.6159	-.5995
.837	-.5616	-.5048	-.5153	-.6179	-.6125	-.5965
.859	-.5616	-.5048	-.5172	-.6192	-.6127	-.5955

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

(XEBK39) (13 AUG 75)

REFERENCE DATA

REFERENCE DATA				PARAMETRIC DATA			
SPRF = 2550.0000	SQ.F.T.	XMRP = 1076.6800 IN. X0		RUDDER = 10.000	SPDBRK = 85.000		
LSPRF = 474.8000	IN.	YMRP = .0000 IN. Y0		BLFLAP = 16.300	L-ELVN = 10.000		
SPRF = 935.0680	IN.	ZMRP = 375.0000 IN. Z0		R-ELVN = 10.000	MACH = 1.250		
SCALE = .0300							
ALPHA : 1) = -3.991	BETA : 1) = -3.847	MACH = 1.2464	0 = 599.79	P = 551.57	RNL = 3.0146		
SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV .3170 .4120 .5070 .6020 .6970 .7920							
X/CV .708 -.6943 -.6967 -.7040 -.7092 -.7025 -.6765							
.757 -.6879 -.6960 -.7056 -.7089 .0000 -.6805							
.805 -.6952 -.7092 .0000 -.6839							
.827 -.6977 -.7223 -.7111 -.7137 -.7059 -.6837							
.833 -.6322 -.7076 -.7130 -.7141 -.7082 -.6894							
ALPHA : 1) = -3.979	BETA : 2) = .190	MACH = 1.2464	0 = 599.79	P = 551.57	RNL = 3.0146		
SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV .3170 .4120 .5070 .6020 .6970 .7920							
X/CV .708 -.7098 -.7124 -.7211 -.7301 -.7182 -.6893							
.757 -.7105 -.7083 -.7241 -.7324 .0000 -.6869							
.805 -.7074 -.7093 -.7277 -.7310 -.7192 -.6874							
.837 -.7041 -.7149 -.7320 -.7350 -.7170 -.6872							
.858 -.7015 -.7220 -.7367 -.7348 -.7121 -.6841							
ALPHA : 1) = -3.998	BETA : 3) = 4.277	MACH = 1.2464	0 = 599.79	P = 551.57	RNL = 3.0146		
SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV .3170 .4120 .5070 .6020 .6970 .7920							
X/CV .708 -.7257 -.7260 -.7395 -.7482 -.7288 -.6968							
.757 -.7227 -.7250 -.7335 -.7503 .0000 -.6862							
.805 -.7169 -.7291 -.7477 -.7499 -.7289 -.6839							
.837 -.7243 -.7402 -.7520 -.7506 -.7259 -.6752							
.868 -.7276 -.7471 -.7529 -.7477 -.7125 -.6579							

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

ALPHA (2) = .059 BETA (1) = -3.868 MACH = 1.2468 Q = 599.86 P = 551.10 RN/L = 3.0101

SECTION : (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7520

X/CV

.769	-.6938	-.7063	-.7176	-.7284	-.7114	-.6771
.757	-.6993	-.7039	-.7211	-.7266	.0000	-.6790
.805	-.6836	-.7019	-.7225	-.7282	-.7142	-.6835
.897	-.6979	-.7043	-.7280	-.7303	-.7152	-.6911
.968	-.6917	-.7104	-.7308	-.7287	-.7131	-.6925

ALPHA (2) = .062 BETA (2) =

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.769	-.6952	-.7007	-.7129	-.7212	-.7079	-.6741
.757	-.6935	-.6971	-.7146	-.7235	.0000	-.6734
.825	-.6955	-.6952	-.7174	-.7264	-.7084	-.6727
.637	-.6938	-.7026	-.7240	-.7264	-.7051	-.6695
.932	-.6917	-.7069	-.7269	-.7280	-.7038	-.6645

ALPHA (2) = .021 BETA (3) = 4.254 MACH = 1.2468

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.769	-.7070	-.7169	-.7246	-.7303	-.7135	-.6706
.757	-.6899	-.7052	-.7300	-.7367	.0000	-.6706
.825	-.6987	-.7117	-.7252	-.7359	-.7146	-.6682
.637	-.7070	-.7246	-.7369	-.7343	-.7106	-.6605
.932	-.7100	-.7285	-.7359	-.7319	-.7094	-.6425

ALPHA (3) = 3.934 BETA (1) = -3.873 MACH = 1.2469

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.769	-.6963	-.6924	-.7075	-.7164	-.6977	-.6665
.757	-.6837	-.6931	-.7074	-.7152	.0000	-.6658
.825	-.6833	-.6894	-.7112	-.7183	-.7003	-.6558
.637	-.6813	-.6952	-.7152	-.7211	-.6934	-.6533
.932	-.6815	-.6969	-.7239	-.7244	-.6949	-.6540

(XE8K39)

RN/L = 3.0101

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TABULATED PRESSURE DATA - OA148 : ANES 11-073-1]

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							(XEBK39)
Z/B/	.3173	.4120	.5070	.6020	.6970	.7920	RNL = 3.0099
X/CY	.708	-.6771	-.5814	-.6942	-.7008	-.5873	-.6592
	.757	-.6672	-.6734	-.6949	-.7033	.0000	.6558
	.625	-.6577	-.6790	-.6970	-.7005	.6828	.6615
	.887	-.6724	-.6795	-.7020	-.7015	.6823	.6567
	.359	-.6735	-.6974	-.7041	-.7041	.6878	.6503
ALPHA (3) = 3.939	BETA (2) = 1.2469	MACH = 1.2469	O = 599.77	P = 599.84	Q = 599.77	R = 599.84	RNL = 3.0099
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							RNL = 3.0131
Z/B/	.3173	.4120	.5070	.6020	.6970	.7920	RNL = 3.0131
X/CY	.706	-.6745	-.6734	-.6879	-.5945	-.6780	-.6510
	.757	-.6641	-.6725	-.6892	-.6969	.0000	.6543
	.625	-.6554	-.6702	-.6912	-.6931	.6799	.6463
	.887	-.6536	-.6782	-.6933	-.7026	.6755	.6503
	.359	-.6595	-.6863	-.7035	-.6993	.6742	.6347
ALPHA (4) = 7.935	BETA (1) = -3.863	MACH = 1.2467	O = 599.84	P = 599.84	Q = 599.84	R = 599.84	RNL = 3.0131
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							RNL = 3.0131
Z/B/	.3173	.4120	.5070	.6020	.6970	.7920	RNL = 3.0131
X/CY	.708	-.6934	-.6777	-.6904	-.7032	-.6810	-.6516
	.757	-.6755	-.6770	-.6942	-.7048	.0000	.6554
	.625	-.6729	-.6733	-.6953	-.7055	.6897	.6528
	.887	-.6599	-.6735	-.7046	-.7072	.6793	.6512
	.359	-.5730	-.6348	-.7108	-.7079	.6765	.6354
ALPHA (4) = -7.857	BETA (2) = 1.2467	MACH = 1.2467	O = 599.84	P = 599.84	Q = 599.84	R = 599.84	RNL = 3.0131
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							RNL = 3.0131
Z/BY	.3173	.4120	.5070	.6020	.6970	.7920	RNL = 3.0131
X/CY	.705	-.6624	-.5713	-.6768	-.6830	-.6768	-.6548
	.757	-.6503	-.6522	-.6997	-.6851	.0000	.6475
	.625	-.6587	-.6549	-.6830	-.6882	.6732	.6527
	.887	-.6556	-.6734	-.6820	-.6915	.6754	.6521
	.359	-.6544	-.6715	-.6943	-.6915	.6740	.6414

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(CA148) - 140A/B/C/R ORB SPEED BRAKE
 $\alpha_{\text{PMA}} (\text{+}) = 7.979 \quad \beta_{\text{TA}} (\text{-} 3) = 4.243 \quad MACH = 1.2467 \quad 0 = 599.84 \quad P = 551.34 \quad RN/L = 3.0131$

SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

χ/χ_C -.6175 -.6185 -.6316 -.6460 -.6259 -.6015

.757 -.6102 -.6184 -.6373 -.6403 -.0000 -.6044

.825 -.6105 -.6215 -.6347 -.6415 -.6287 -.6112

.887 -.6123 -.6279 -.6444 -.6448 -.6302 -.6070

.958 -.6155 -.6297 -.6486 -.6415 -.6287 -.6144

$\alpha_{\text{PMA}} (\text{-} 5) = 11.869 \quad \beta_{\text{TA}} (\text{-} 1) = -3.849 \quad MACH = 1.2475 \quad 0 = 600.06 \quad P = 550.87 \quad RN/L = 3.0127$

SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

χ/χ_C -.6635 -.6590 -.6756 -.6879 -.6674 -.6355

.757 -.6553 -.6593 -.6792 -.6903 -.0000 -.6402

.825 -.6614 -.6855 -.6919 -.6900 -.6397

.887 -.6620 -.6660 -.6936 -.6936 -.6650 -.6376

.958 -.6572 -.6535 -.6348 -.6396 -.6581 -.6211

$\alpha_{\text{PMA}} (\text{-} 5) = 11.810 \quad \beta_{\text{TA}} (\text{-} 2) = -187 \quad MACH = 1.2475 \quad 0 = 600.06 \quad P = 550.87 \quad RN/L = 3.0127$

SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

χ/χ_C -.6355 -.6309 -.6438 -.6521 -.6447 -.6178

.757 -.6237 -.6208 -.6513 -.6554 -.0000 -.6204

.825 -.6256 -.6334 -.6466 -.6589 -.6513 -.6249

.887 -.6257 -.6293 -.6584 -.6601 -.6431 -.6279

.958 -.6284 -.6454 -.6594 -.6580 -.6426 -.6246

$\alpha_{\text{PMA}} (\text{-} 5) = 11.856 \quad \beta_{\text{TA}} (\text{-} 3) = 4.252 \quad MACH = 1.2475 \quad 0 = 600.06 \quad P = 550.87 \quad RN/L = 3.0127$

SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

χ/χ_C -.6049 -.6119 -.6177 -.6324 -.6166 -.5983

.757 -.6015 -.5121 -.6182 -.6315 .0000 -.5993

.825 -.6049 -.6130 -.6260 -.6260 -.6189 -.6078

.887 -.6032 -.6110 -.6334 -.6296 -.6135 -.5949

.958 -.6052 -.6230 -.6331 -.6263 -.6158 -.6075

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SEEF = 2690.0000 SQ.FT. XMP = 1076.6800 IN. XO
 ZEF = .74.6000 IN. YMP = .0000 IN. YO
 ZEF = 935.5360 IN. ZMP = 375.0000 IN. ZO
 SCALE = .0300

ALPHA (1) = -3.999 BETA (1) = -3.842 MACH = 1.1017 O = 601.11 P = 707.47 RN/L = 3.1883

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/C_V
 .708 -.7618 -.7564 -.7684 -.7910 -.7766 -.7318
 .757 -.7457 -.7524 -.7757 -.7969 .0000 -.7297
 .805 -.7423 -.7575 -.7987 -.7998 -.7762 -.7382
 .827 -.7500 -.7668 -.7935 -.8007 -.7729 -.7361
 .558 -.7544 -.7942 -.8071 -.8017 -.7693 -.7359

ALPHA (2) = -3.997 BETA (2) = .194 MACH = 1.1017 Q = 601.11 P = 707.47 RN/L = 3.1883

SECTION (2) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C_V
 .752 -.7175 -.7255 -.7430 -.7496 -.7234 -.7060
 .737 -.7177 -.7179 -.7449 -.7499 .0000 -.7034
 .625 -.7146 -.7212 -.7453 -.7499 -.7239 -.7083
 .637 -.7224 -.7385 -.7525 -.7492 -.7265 -.7137
 .368 -.7235 -.7187 -.7569 -.7553 -.7159 -.7069
 ALPHA (3) = -3.995 BETA (3) = 4.277 MACH = 1.1017 O = 601.11 P = 707.47 RN/L = 3.1883

SECTION (3) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C_V
 .728 -.7643 -.7533 -.7689 -.7850 -.7597 -.7089
 .757 -.7444 -.7485 -.7902 -.7924 .0000 -.7095
 .805 -.7365 -.7516 -.7885 -.7936 -.7500 -.7164
 .837 -.7548 -.7723 -.8044 -.8000 -.7500 -.7159
 .562 -.7621 -.7929 -.9142 -.8009 -.7395 -.7085

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(XEROX) (13 AUG 75)

PARAMETRIC DATA

RUDDER = 10.000 SPOBRK = 85.000
 BDFLAP = 16.300 L-ELVN = 10.000
 R-ELVN = 10.000 MACH = 1.100

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TABULATED PRESSURE DATA - OATHB (AMES 11-073-1)

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AMES 11-0731(OA148) - 140A/B/C/R ORB SPEED BRAKE SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.708	-.7000	-.6952	-.7111	-.7279	-.7212	-.6841
.757	-.6936	-.7019	-.7184	-.7352	-.0000	-.6890
.805	-.6968	-.7025	-.7283	-.7411	-.7272	-.6903
.853	-.6991	-.7074	-.7407	-.7430	-.7196	-.6908
.901	-.7055	-.7235	-.7466	-.7442	-.7151	-.6930
ALPHA (2) = .018	BETA (2) = .181	MACH = 1.1001	0	-600.08	P = 708.37	RNL = 3.1860
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.729	-.6804	-.6811	-.6958	-.7119	-.6922	-.6627
.757	-.6733	-.6747	-.7010	-.7131	.0000	-.6679
.805	-.6754	-.6849	-.7057	-.7138	-.7015	-.6721
.853	-.6790	-.6893	-.7157	-.7173	-.6892	-.6760
.901	-.6910	-.7049	-.7209	-.7194	-.6913	-.6585
ALPHA (2) = .012	BETA (3) = .4250	MACH = 1.1001	0	-600.08	P = 708.37	RNL = 3.1860
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.728	-.6359	-.6449	-.6691	-.6819	-.6466	-.6052
.757	-.6322	-.6451	-.6774	-.6864	.0000	-.6147
.805	-.6322	-.5513	-.5843	-.6059	-.6483	-.6187
.853	-.6511	-.6763	-.6930	-.6901	-.6485	-.6154
.901	-.6572	-.6831	-.7032	-.6906	-.6407	-.6130
ALPHA (3) = .3.913	BETA (1) = -3.865	MACH = 1.1005	0	-600.31	P = 708.14	RNL = 3.1648
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.728	-.6614	-.6650	-.5805	-.7060	-.6916	-.6549
.757	-.6532	-.6672	-.6554	-.7067	.0000	-.6569
.805	-.6513	-.6693	-.6911	-.7145	-.6932	-.6601
.853	-.6573	-.6737	-.7074	-.7148	-.6873	-.6600
.901	-.6711	-.6929	-.7157	-.7178	-.6845	-.6439

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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AMES 11-073(OAI48) - 140A/B/C/R ORB SPEED BRAKE

$\alpha_{crit} = 3.917$ $\beta_{crit} = 1.2$ = .178 MACH = 1.1005 0 = 600.31 P = 708.14 RN/L = 3.1848
 SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .728 -.5985 -.5984 -.6205 -.6406 -.6189 -.5909
 .757 -.5383 -.5383 -.6300 -.6420 .0000 -.5959
 .635 -.5982 -.6112 -.6366 -.6416 -.6222 -.5990
 .687 -.6076 -.6235 -.6472 -.6458 -.6241 -.6044
 .598 -.6206 -.6255 -.5524 -.6446 -.6203 -.5918

$\alpha_{crit} = 3.924$ $\beta_{crit} = 1.3$ = 4.244 MACH = 1.1005 0 = 600.31 P = 708.14 RN/L = 3.1848
 SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .753 -.5975 -.6061 -.6219 -.6421 -.6222 -.5801
 .757 -.5979 -.6025 -.6231 -.6449 .0000 -.5777
 .665 -.5971 -.6169 -.6489 -.6593 -.6200 -.5808
 .687 -.6049 -.6309 -.6501 -.6539 -.6200 -.5842
 .568 -.6158 -.5557 -.6579 -.6494 -.6390 -.5698

$\alpha_{crit} = 7.901$ $\beta_{crit} = 1.1$ = -3.860 MACH = 1.1015 0 = 600.67 P = 707.22 RN/L = 3.1834
 SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .728 -.6428 -.6513 -.6593 -.6895 -.6738 -.6371
 .757 -.6464 -.6564 -.6726 -.6933 .0000 -.6404
 .635 -.6350 -.6527 -.6816 -.6977 -.6783 -.6463
 .687 -.5419 -.6614 -.6910 -.7023 -.6719 -.6326
 .958 -.5515 -.5718 -.7035 -.6338 -.6659 -.6132

$\alpha_{crit} = 7.905$ $\beta_{crit} = 1.2$ = .181 MACH = 1.1015 0 = 600.67 P = 707.22 RN/L = 3.1834
 SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .729 -.5062 -.6119 -.6309 -.6431 -.6322 -.5960
 .757 -.6246 -.6176 -.6322 -.6452 .0000 -.5998
 .635 -.6225 -.6155 -.6393 -.6535 -.6243 -.6014
 .687 -.5234 -.6222 -.6452 -.6465 -.6312 -.6005
 .568 -.5225 -.5253 -.6572 -.6535 -.6277 -.5925

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\alpha_{\text{PFA}} + \beta_1 = 7.954 \quad \text{BETA} : 3 = 4.239 \quad \text{MACH} = 1.1015 \quad Q = 600.67 \quad P = 707.22 \quad RN/L = 3.1834$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5835 -.5396 -.6157 -.6377 -.6185 -.5734

.757 -.5956 -.5955 -.6199 -.6398 .0000 -.5746

.805 -.5842 -.5995 -.6295 -.6471 -.6176 -.5793

.857 -.5923 -.6137 -.6452 -.6431 -.6207 -.5811

.908 -.6054 -.6352 -.6521 -.6431 -.6166 -.5715

 $\alpha_{\text{PFA}} + \beta_1 = 11.956 \quad \text{BETA} : 1 = -3.844 \quad \text{MACH} = 1.0995 \quad 0 = 600.08 \quad P = 709.07 \quad RN/L = 3.1837$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6830 -.6873 -.7083 -.7325 -.7126 -.6670

.757 -.6731 -.6859 -.7105 -.7313 .0000 -.6712

.805 -.6726 -.6532 -.7247 -.7370 -.7157 -.6748

.857 -.6854 -.7060 -.7388 -.7503 -.7199 -.6893

.908 -.6977 -.7216 -.7412 -.7327 -.7027 -.6478

 $\alpha_{\text{PFA}} + \beta_1 = 11.808 \quad \text{BETA} : 2 = .183 \quad \text{MACH} = 1.0995 \quad 0 = 600.08 \quad P = 709.07 \quad RN/L = 3.1837$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6652 -.6673 -.6883 -.7105 -.6916 -.6496

.757 -.6649 -.6673 -.6950 -.7093 .0000 -.6531

.805 -.6575 -.6593 -.6997 -.7072 -.7029 -.6600

.857 -.6783 -.6893 -.7117 -.7194 -.6325 -.6639

.908 -.6821 -.7041 -.7079 -.7138 -.6311 -.6488

 $\alpha_{\text{PFA}} + \beta_1 = 11.955 \quad \text{BETA} : 3 = 4.250 \quad \text{MACH} = 1.0995 \quad 0 = 600.08 \quad P = 709.07 \quad RN/L = 3.1837$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6183 -.6247 -.6521 -.6765 -.6475 -.6035

.757 -.6124 -.6278 -.6335 -.6738 .0000 -.6056

.805 -.6131 -.6211 -.6723 -.5934 -.5456 -.6118

.857 -.6145 -.6267 -.6227 -.6666 -.6461 -.6279

.908 -.6245 -.6216 -.6919 -.6552 -.6467 -.6291

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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(XEBK41) (13 AUG 75)

REFERENCE DATA

REFERENCE DATA						PARAMETRIC DATA		
SECTION	X/CV	YMAP	ZMAP	MACH	P	RUDDER	SPDBRK	BOFLAP
1-24 (1) = -3.997	BETA (1) = -3.840	MACH = .89993	0 = 599.67	P = 1057.8	R-N/L = 3.5780	10.000	10.000	L-ELVN = 10.000
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				10.000	16.300	R-ELVN = .900
2-34	.3170	.4121	.5070	.6020	.6970	.7920		
X/CV	.7268 .7517 .8125 .8567 .9333	-.4099 -.407 -.4160 -.4125 -.4243	-.4223 -.4257 -.4302 -.4457 -.4623	-.4369 -.4582 -.4577 -.4688 -.4723	-.4539 -.4582 -.4577 -.4622 -.4657	-.4357 -.4000 -.4461 -.4447 -.4432	-.3995 .4085 -.4127 -.4107 -.4052	
ALPHA (1) = -3.991	BETA (2) = .189	MACH = .89993	0 = 599.67	P = 1057.8	R-N/L = 3.5780			
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP						
2-34	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV	.7268 .7517 .8125 .8567 .9333 .9818	-.3959 -.3946 -.3958 -.4033 -.4262 -.4262	-.4283 -.4112 -.4292 -.4253 -.4435	-.4293 -.4346 -.4539 -.4506 -.4573	-.4549 -.4530 -.4521 -.4575 -.4547	-.4247 -.0000 -.4293 -.4225 -.4284	-.3939 -.3927 -.3913 -.3846 -.3917	
ALPHA (1) = -3.992	BETA (3) = 4.274	MACH = .89993	0 = 599.67	P = 1057.8	R-N/L = 3.5780			
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP						
2-34	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV	.7268 .7517 .8125 .8567 .9333 .9818	-.3978 -.3943 -.4022 -.4031 -.4242	-.4139 -.4152 -.4145 -.4131 -.4153	-.4115 -.4120 -.4145 -.4132 -.4157	-.4489 -.4479 -.4458 -.4571 -.4543	-.4193 -.0000 -.4502 -.4198 -.4168	-.3718 -.3777 -.3815 -.3509 -.3702	

AMES 11-07310A1481 - 140A/B/C/R ORB SPEED BRAKE

 $\alpha_{\text{FAB}} + 21 = .352 \quad \beta_{\text{TA}} (1) = -3.863 \quad \text{MACH} = .89853 \quad 0 = 598.47 \quad P = 1059.0 \quad RN/L = 3.5741$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV 3:7C .4120 .5070 .6020 .6970 .7920

Y/CA 3:7C .4120 .5070 .6020 .6970 .7920

X/CA 3:7C .4120 .5070 .6020 .6970 .7920

 $\alpha_{\text{FAB}} + 21 = .355 \quad \beta_{\text{TA}} (2) = .182 \quad \text{MACH} = .89853 \quad 0 = 598.47 \quad P = 1059.0 \quad RN/L = 3.5741$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV 3:7C .4120 .5070 .6020 .6970 .7920

Y/CA 3:7C .4120 .5070 .6020 .6970 .7920

X/CA 3:7C .4120 .5070 .6020 .6970 .7920

 $\alpha_{\text{FAB}} + 21 = .370 \quad \beta_{\text{TA}} (3) = 4.253 \quad \text{MACH} = .89853 \quad 0 = 598.47 \quad P = 1059.0 \quad RN/L = 3.5741$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV 3:7C .4120 .5070 .6020 .6970 .7920

Y/CA 3:7C .4120 .5070 .6020 .6970 .7920

X/CA 3:7C .4120 .5070 .6020 .6970 .7920

 $\alpha_{\text{FAB}} + 21 = .377 \quad \beta_{\text{TA}} (1) = -3.868 \quad \text{MACH} = .89830 \quad 0 = 598.51 \quad P = 1059.5 \quad RN/L = 3.5778$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV 3:7C .4120 .5070 .6020 .6970 .7920

Y/CA 3:7C .4120 .5070 .6020 .6970 .7920

X/CA 3:7C .4120 .5070 .6020 .6970 .7920

 $\alpha_{\text{FAB}} + 21 = .384 \quad \beta_{\text{TA}} (2) = .182 \quad \text{MACH} = .89830 \quad 0 = 598.51 \quad P = 1059.5 \quad RN/L = 3.5778$

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TABULATED PRESSURE DATA - OA148 (A-75 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE (XEBK41)									
SECTION : 1 RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
ALPHA : 3 = + 4.015 BETA : 3 = 4.245 MACH = .89830 P = 1059.5 RN/L = 3.5778									
X/C	.3170	.4120	.5070	.6020	.6970	.7920			
Y/C	-1.4222	-1.4224	-1.4745	-1.4816	-1.4641	-1.4125			
Z/B	-1.0117	-1.0287	-1.4757	-1.4847	.0000	-1.4148			
ALPHA : 4 = 7.919 BETA : 1 = -3.861 MACH = .89927 P = 1058.3 RN/L = 3.5789									
SECTION : 1 RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
X/C	.3170	.4120	.5070	.6020	.6970	.7920			
Y/C	-1.4985	-1.5132	-1.5264	-1.5865	-1.5701	-1.4956			
Z/B	-1.0275	-1.0164	-1.5590	-1.5220	.0000	-1.4961			
ALPHA : 4 = 7.925 BETA : 1 = .181 MACH = .89927 P = 1058.3 RN/L = 3.5789									
SECTION : 1 RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
X/C	.3170	.4120	.5070	.6020	.6970	.7920			
Y/C	-1.4723	-1.4753	-1.4846	-1.5306	-1.5135	-1.4490			
Z/B	-1.0458	-1.0521	-1.5228	-1.5243	.0000	-1.4530			

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TABULATED PRESSURE DATA - CA14B (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C/R ORB SPEED BRAKE

IXEBK(1)

ALPHA = 11 = 7.877 SETA (3) = 4.247 MACH = .89927 0 = 599.06 P = 1059.3 RNL = 3.5769

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

-7.08	-4.532	-4.719	-4.925	-5.240	-5.038	-4.405
-7.57	-4.040	-4.712	-5.048	-5.335	.0000	-4.465
-8.05	-4.687	-4.758	-5.266	-5.273	-4.922	-4.377
-8.87	-4.729	-5.241	-5.462	-5.354	-4.991	-4.348
-9.53	-4.850	-5.251	-5.444	-5.247	-4.863	-4.303

ALPHA = 51 = 11.893 SETA (1) = -3.850 MACH = .89863 0 = 598.63 P = 1059.0 RNL = 3.5769

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

-7.58	-5.191	-5.513	-5.833	-6.295	-5.928	-5.141
-7.57	-5.188	-5.58	-6.027	-6.403	.0000	-5.060
-8.05	-5.553	-5.513	-6.253	-6.522	-5.876	-4.927
-8.87	-5.599	-5.877	-6.442	-6.335	-5.741	-4.928
-9.53	-5.605	-6.176	-6.521	-6.229	-5.5627	-4.833

ALPHA = 51 = 11.893 SETA (2) = -1.191 MACH = .89863 0 = 598.63 P = 1059.0 RNL = 3.5769

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

-7.09	-4.910	-5.047	-5.151	-5.260	-5.612	-4.902
-7.57	-5.035	-5.075	-5.285	-5.078	.0000	-4.888
-8.05	-4.638	-5.65	-5.972	-5.993	-5.579	-4.986
-8.87	-5.233	-5.463	-5.064	-5.943	-5.515	-4.792
-9.53	-5.436	-5.795	-6.116	-5.951	-5.437	-4.672

ALPHA = 51 = 11.893 SETA (3) = 4.259 MACH = .89863 0 = 598.63 P = 1059.0 RNL = 3.5769

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

-7.09	-4.956	-5.021	-5.95	-5.838	-5.514	-4.797
-7.57	-4.934	-4.988	-5.935	-5.956	.0000	-4.787
-8.05	-4.945	-5.273	-5.529	-5.805	-5.50	-4.844
-8.87	-5.032	-5.476	-5.693	-5.800	-5.343	-4.685
-9.53	-5.032	-5.773	-6.113	-5.931	-5.444	-4.6514

111-073-18 TERRATED PRESSURE DATA - CA146 (AMES 11-073-1)

AMES 11-073(CA146) -150A/B/C/R CRB SPEED BRAKE

REFERENCE DATA

SECTION	WINGSPAN	Z-C.R.	X-C.R.	Y-C.R.	Z-C.R.	AIRSP	IN. X0	IN. Y0	IN. Z0
1	.3172	.4122	.5070	.6020	.6970	.7920			

A₂-P-4, 1, 1 = -2.0+3 BETA (1) = -7.852 MACH = .59622

SECTION 1: RIGHT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 2 = -2.371 BETA (2) = -3.842 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 3 = -2.238 BETA (3) = .191 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 4 = -2.371 BETA (4) = -.5714 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 5 = -2.371 BETA (5) = -.5377 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 6 = -2.371 BETA (6) = -.5472 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 7 = -2.371 BETA (7) = -.5555 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 8 = -2.371 BETA (8) = -.5630 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 9 = -2.371 BETA (9) = -.5738 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 10 = -2.371 BETA (10) = -.5815 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 11 = -2.371 BETA (11) = -.5895 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 12 = -2.371 BETA (12) = -.5975 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 13 = -2.371 BETA (13) = -.6055 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 14 = -2.371 BETA (14) = -.6130 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

A₂-P-4, 1, 15 = -2.371 BETA (15) = -.6200 MACH = .59622

SECTION 1: LEFT HAND SIDE DEPENDENT VARIABLE CP

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(EXCERPT) (13 AUG 75)

PARAMETRIC DATA

RUDDER	10.000	SPECIM	55.000
BDFLAP	16.300	L-ELVN	40.000
R-ELVN	10.000	MACH	.600

P = .8696

ORIENTAL PLATE
OF 2005 QUALITY

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

AMES 11-07310A1481 - 140A/B/C/R ORB SPEED BRAKE
 SECTION 1 (RIGHT HAND INSIDE) DEPENDENT VARIABLE CP
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.4531 -.4921 -.5251 -.5327 -.4910 -.4330
 .757 -.4590 -.4768 -.5201 -.5367 .0000 -.4253
 .805 -.4710 -.5055 -.5562 -.5301 -.4891 -.4218
 .687 -.4847 -.5373 -.5624 -.5334 -.4810 -.4159
 .968 -.4970 -.5567 -.5362 -.5286 -.4837 -.4111
 ALPHA (1) = -3.999 BETA (5) = 8.293 MACH = .59622
 SECTION 1 (RIGHT HAND INSIDE) DEPENDENT VARIABLE CP
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .758 -.4937 -.5112 -.5565 -.5585 -.5108 -.42882
 .757 -.4935 -.5190 -.5711 -.5535 .0000 -.4182
 .805 -.4934 -.5234 -.5675 -.5492 -.4899 -.4210
 .887 -.5197 -.5686 -.5906 -.5547 -.4913 -.4196
 .958 -.5267 -.5891 -.5897 -.5454 -.4782 -.3996
 ALPHA (2) = -.003 BETA (1) = -7.885 MACH = .59612
 SECTION 1 (RIGHT HAND INSIDE) DEPENDENT VARIABLE CP
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6126 -.6492 -.7095 -.7278 -.6365 -.4931
 .757 -.6159 -.6634 -.7362 -.7152 .0000 -.4908
 .805 -.6114 -.6799 -.7631 -.7276 -.6200 -.4865
 .887 -.6246 -.6992 -.7503 -.7035 -.6105 -.4726
 .958 -.6350 -.7263 -.7579 -.7073 -.6029 -.4668
 ALPHA (2) = -.104 BETA (2) = -3.860 MACH = .59612
 SECTION 1 (RIGHT HAND INSIDE) DEPENDENT VARIABLE CP
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .758 -.5330 -.5488 -.5056 -.6173 -.5682 -.4778
 .757 -.5223 -.5517 -.6230 -.6168 .0000 -.4792
 .805 -.5258 -.5670 -.6304 -.6251 -.5656 -.4614
 .887 -.5422 -.6060 -.6425 -.6199 -.5613 -.4604
 .958 -.5736 -.6254 -.6520 -.6187 -.5551 -.4656
 ALPHA (2) = -.104 BETA (2) = -3.860 MACH = .59612
 SECTION 1 (RIGHT HAND INSIDE) DEPENDENT VARIABLE CP
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

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(XEBK42)

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TABLED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14R) -140A/B/C/R ORB SPEED BRAKE SECTION (:RIGHT HAND INSIDE Z/EV .3170 .4120 .5070 .6020 .6970 .7920 X/CY							(XE8K42)						
ALPHA (2) = .114	BETA (3) = .193	MACH = .59612	O = .593.61	P = .593.61	RNL = 2386.1		ALPHA (2) = .111	BETA (4) = .251	MACH = .59612	O = .593.61	P = .593.61	RNL = 2386.1	
SECTION (:RIGHT HAND INSIDE Z/EV .3170 .4120 .5070 .6020 .6970 .7920 X/CY	DEPENDENT VARIABLE CP						(XE8K42)						
.759 -.4917 -.5033 -.5523 -.5687 -.5228 -.4394 .757 -.4930 -.5159 -.5675 -.5782 -.0000 -.4477 .855 -.4951 -.5216 -.5227 -.5673 -.5228 -.4406 .887 -.5367 -.5674 -.6105 -.5589 -.5081 -.4323 .953 -.5294 -.5839 -.6029 -.5744 -.5133 -.4318	DEPENDENT VARIABLE CP						ALPHA (2) = .360	BETA (5) = .8.310	MACH = .59612	O = .593.61	P = .593.61	RNL = 2386.1	
SECTION (:RIGHT HAND INSIDE Z/EV .3170 .4120 .5070 .6020 .6970 .7920 X/CY	DEPENDENT VARIABLE CP						(XE8K42)						
.759 -.5318 -.5501 -.6009 -.5045 -.5524 -.4399 .757 -.5306 -.5629 -.6169 -.6197 -.0000 -.4522 .855 -.5154 -.5314 -.5247 -.6181 -.5317 -.4394 .857 -.5154 -.5637 -.6421 -.6102 -.5156 -.4282 .953 -.5750 -.6440 -.6461 -.6026 -.5222 -.4087	DEPENDENT VARIABLE CP						ALPHA (3) = .4.041	BETA (11) = -.7.899	MACH = .59674	O = .594.79	P = .594.79	RNL = 2386.0	
SECTION (:RIGHT HAND INSIDE Z/EV .3170 .4120 .5070 .6020 .6970 .7920 X/CY	DEPENDENT VARIABLE CP						(XE8K42)						
.759 -.6226 -.7254 -.7839 -.7989 -.6884 -.5046 .757 -.6613 -.7467 -.8232 -.7901 -.0000 -.5039 .855 -.6723 -.7651 -.8133 -.8005 -.6656 -.4737 .887 -.6212 -.7237 -.7863 -.6997 -.4598 .953 -.7308 -.6299 -.8528 -.7979 -.6512 -.4257	DEPENDENT VARIABLE CP												

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\alpha_{\text{FHA}} (3) = 3.969 \quad \beta_{\text{TA}} (2) = -3.860 \quad \text{MACH} = .59674 \quad 0 = 594.79 \quad P = 2386.0 \quad RN/L = 4.8833$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .708 -.5504 -.5575 -.6157 -.6138 -.5841 -.4730
 .757 -.5306 -.5617 -.6376 -.6123 -.0000 -.4628
 .805 -.5393 -.5836 -.6659 -.6471 -.5704 -.4647
 .887 -.5532 -.6155 -.6875 -.6338 -.5749 -.4494
 .958 -.5723 -.6628 -.6777 -.6433 -.5675 -.4461

$\alpha_{\text{PHA}} (3) = 4.049 \quad \beta_{\text{TA}} (3) = .193 \quad \text{MACH} = .59674 \quad 0 = 594.79 \quad P = 2386.0 \quad RN/L = 4.8833$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .709 -.5178 -.5489 -.5927 -.6291 -.5680 -.4852
 .757 -.5263 -.5569 -.6253 -.6208 .0000 -.4873
 .805 -.5395 -.5701 -.6298 -.6229 -.5718 -.4771
 .827 -.5513 -.5945 -.6509 -.6203 -.5611 -.4682
 .958 -.5559 -.6263 -.6459 -.6229 -.5502 -.4684

$\alpha_{\text{PHA}} (3) = 3.947 \quad \beta_{\text{TA}} (4) = .4.242 \quad \text{MACH} = .59674 \quad 0 = 594.79 \quad P = 2386.0 \quad RN/L = 4.8833$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .738 -.4841 -.5173 -.5719 -.5871 -.5382 -.4420
 .757 -.4935 -.5131 -.5852 -.5892 .0000 -.4301
 .805 -.4989 -.5302 -.5973 -.5947 -.5265 -.4280
 .887 -.5169 -.5750 -.6239 -.5828 -.5220 -.4255
 .958 -.5390 -.6039 -.6134 -.5892 -.5284 -.4147

$\alpha_{\text{PHA}} (3) = 3.985 \quad \beta_{\text{TA}} (5) = 9.292 \quad \text{MACH} = .59674 \quad 0 = 594.79 \quad P = 2386.0 \quad RN/L = 4.8833$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .708 -.5625 -.6006 -.6643 -.6780 -.5682 -.4599
 .757 -.5655 -.5975 -.6747 -.6538 .0000 -.4502
 .805 -.5848 -.6230 -.5875 -.6773 -.5610 -.4364
 .887 -.5224 -.5724 -.5939 -.6450 -.5534 -.4291
 .958 -.6300 -.7131 -.7127 -.6493 -.5340 -.4039

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE
 $\alpha_{\text{L}} = 7.305 \quad \beta_{\text{L}} = -7.888 \quad MACH = .59644 \quad Q = 594.20 \quad P = 2386.1 \quad RNL = 4.8802$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6370	-.6759	-.7697	-.7554	-.6055	-.3979
.757	-.5344	-.6895	-.7820	-.7402	.0000	-.3998
.805	-.6295	-.7235	-.7961	-.7562	.5844	-.3789
.887	-.6464	-.7755	-.8185	-.7419	.5568	-.3724
.968	-.6589	-.7918	-.8374	-.7402	.5324	-.3665

$\alpha_{\text{L}} = 7.915 \quad \beta_{\text{L}} = -3.855 \quad MACH = .59644 \quad Q = 594.20 \quad P = 2386.1 \quad RNL = 4.8802$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5601	-.5787	-.6399	-.6666	-.6028	-.4904
.757	-.5620	-.5892	-.6513	-.6547	.0000	-.4797
.805	-.5653	-.6124	-.6927	-.6806	.5964	-.4821
.887	-.5749	-.6425	-.7034	-.6689	.5892	-.4568
.958	-.5959	-.6908	-.7072	-.6637	.5681	-.4601

$\alpha_{\text{L}} = 8.038 \quad \beta_{\text{L}} = -1.31 \quad MACH = .59644 \quad Q = 594.20 \quad P = 2386.1 \quad RNL = 4.8802$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5404	-.5293	-.6354	-.6581	-.6038	-.5067
.757	-.5508	-.5680	-.6403	-.6401	.0000	-.4877
.805	-.5530	-.5924	-.6579	-.6657	.5841	-.4908
.887	-.5658	-.6224	-.5956	-.6475	.5748	-.4759
.958	-.5890	-.6627	-.6934	-.6510	.5760	-.4715

$\alpha_{\text{L}} = 8.035 \quad \beta_{\text{L}} = 4.244 \quad MACH = .59644 \quad Q = 594.20 \quad P = 2386.1 \quad RNL = 4.8802$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5125	-.5333	-.5876	-.6173	-.5693	-.4662
.757	-.5247	-.5457	-.6033	-.6256	.0000	-.4688
.805	-.5420	-.5576	-.6225	-.6147	.5467	-.4579
.887	-.5421	-.5958	-.6499	-.6192	.5456	-.4422
.958	-.5619	-.6441	-.6434	-.6196	.5327	-.4233

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

(XEBK42)

A_PFA : 41 = 8.035 BETA (5) = 8.296 MACH = .59644 Q = 594.20 P = 2386.1 RNL = 4.88802

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .7CB -.5447 -.5828 -.6631 -.6676 -.5474 -.3979

.757 -.5565 -.5908 -.6871 -.6653 .0000 -.3946

.805 -.5554 -.6157 -.6935 -.6539 -.5395 -.3867

.887 -.5040 -.6649 -.7141 -.6416 -.5151 -.3845

.959 -.6170 -.7105 -.7201 -.6356 -.4890 -.3415

ALPHA (5) = 11.910 BETA (1) = -7.853 MACH = .59658 Q = 594.43 P = 2385.8 RNL = 4.88825

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .7CB -.6715 -.6975 -.7995 -.7802 -.6232 -.4382

.757 -.6727 -.7220 -.8181 -.7673 .0000 -.4296

.805 -.5760 -.7539 -.8359 -.7838 -.6170 -.4232

.887 -.6621 -.7994 -.8542 -.7697 -.6020 -.4145

.959 -.7093 -.8443 -.8635 -.7578 -.5825 -.4100

ALPHA (5) = 11.930 BETA (2) = -3.836 MACH = .59658 Q = 594.43 P = 2385.3 RNL = 4.88825

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .7CB -.5706 -.5961 -.6730 -.6839 -.5983 -.4630

.757 -.5812 -.6149 -.6834 -.6944 .0000 -.4566

.805 -.5798 -.6307 -.7070 -.6863 -.5869 -.4535

.887 -.5810 -.6546 -.7367 -.6796 -.5757 -.4312

.959 -.6126 -.7341 -.7383 -.6789 -.5659 -.4236

ALPHA (5) = 11.956 BETA (3) = .177 MACH = .59658 Q = 594.43 P = 2385.8 RNL = 4.88825

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .7CB -.5757 -.6039 -.6563 -.6891 -.6247 -.5154

.757 -.5555 -.5957 -.6813 -.6827 .0003 -.5040

.805 -.5745 -.6353 -.6938 -.6822 -.6138 -.5054

.887 -.6325 -.6945 -.7041 -.6758 -.5924 -.4890

.959 -.6131 -.7345 -.7173 -.6775 -.5967 -.4915

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0148) - 1140A/B/C/R ORG SPEED BRAKE (XEBK42)						
ALPHA (S) = 11.975	BETA (4) = 4.252	MACH = .59658	Q = 594.43	P = 2385.8	R/N/L = 4.8825	
SECTION : FLIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/EV	.3173	.4120	.5070	.6020	.6970	.7920
X/CY	.739	-.5153	-.5523	-.6221	-.6416	-.5777
	.757	-.5255	-.5577	-.6432	-.6501	-.6000
	.825	-.5222	-.5707	-.6465	-.6518	-.5484
	.897	-.5516	-.6132	-.6768	-.6349	-.5499
	.363	-.5552	-.6539	-.6755	-.626	-.4445
ALPHA (S) = 12.034	BETA (5) = 8.318	MACH = .59658	Q = 594.43	P = 2385.8	R/N/L = 4.8825	
SECTION : FLIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/EV	.3173	.4120	.5070	.6020	.6970	.7920
X/CY	.739	-.5313	-.6215	-.6868	-.7034	-.6151
	.757	-.5721	-.6252	-.7162	-.7119	-.6000
	.825	-.6113	-.6433	-.7392	-.7048	-.5914
	.897	-.6463	-.6893	-.7618	-.7060	-.5724
	.963	-.6641	-.7395	-.7632	-.6875	-.5477

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SREF = 2690.0000 SO.FT. XRP = 1076.6900 IN. X0
 LREF = .474800 IN. YRP = .0000 IN. Y0
 BREF = 935.0680 IN. ZRP = 375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -4.070 BETA (1) = -3.850 MACH = .89792 0 = 598.79 P = 1060.9 RN/L = 3.6697

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CSV -.4584 -.4898 -.5314 -.5724 -.5257 -.4515

.708 -.4718 -.4927 -.5503 -.5783 -.0000 -.4484

.805 -.4752 -.5066 -.5785 -.5797 -.5198 -.4437

.587 -.4935 -.5409 -.5901 -.5738 -.5210 -.4309

.363 -.5149 -.5695 -.6032 -.5667 -.5117 -.4229

ALPHA : 1) = -4.069 BETA : 2) = .187 MACH = .89793 0 = 598.79 P = 1060.9 RN/L = 3.6697

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CSV -.4338 -.4574 -.4902 -.5278 -.5058 -.4241

.708 -.4425 -.4591 -.5070 -.5333 -.0000 -.4255

.557 -.4524 -.4683 -.5288 -.5321 -.5018 -.4291

.605 -.4709 -.4730 -.5404 -.5361 -.4980 -.4242

.887 -.4909 -.5395 -.5567 -.5460 -.4937 -.4189

.958 -.5107 -.5522 -.5691 -.5222 -.5249 -.4357

ALPHA : 1) = -4.078 BETA : 3) = 4.272 MACH = .89793 0 = 598.79 P = 1060.9 RN/L = 3.6697

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CSV -.4637 -.4802 -.5339 -.5635 -.5275 -.4411

.708 -.4695 -.4913 -.5540 -.5762 -.0000 -.4423

.757 -.4866 -.5095 -.5919 -.5665 -.5235 -.4356

.605 -.4281 -.5551 -.5223 -.5807 -.5178 -.4371

.627 -.5352 -.5691 -.6022 -.5249 -.5107 -.4357

.639 -.5352 -.5691 -.6022 -.5249 -.5107 -.4357

PARAMETRIC DATA

RUDDER = .000 SPDBRK = 55.000
 BDFLAP = 22.500 L-ELVN = 10.000
 R-ELVN = .900

(XEBK43) (13 AUG 75)

AMES 11-073(OA14B) - 140A/B/C/R CHB SPEED BRAKE

SECTION 1: RIGHT HAND INSIDE
SECTION 1: RIGHT HAND INSIDE

ALPHA : 21 = -.023 BETA : 11 = -3.555 MACH = .89677 O = 597.91 P = 1062.1 RNL = 3.6486

DEPENDENT VARIABLE CP

Z BY .317C .412C .5070 .6020 .6970 .7920

X,CY -.4925 -.5031 -.5529 -.5844 -.5508 -.4608

.457 -.4879 -.5164 -.5227 -.5981 .0000 -.4582

.457 -.4934 -.5345 -.6021 -.6090 -.5418 -.4558

.387 -.5030 -.5735 -.6177 -.6092 -.5370 -.4354

.365 -.5240 -.6075 -.6369 -.6000 -.5226 -.4269

ALPHA : 21 = -.015 BETA : 21 = .185 MACH = .89677 O = 597.91 P = 1062.1 RNL = 3.6486

DEPENDENT VARIABLE CP

Z BY .317C .412C .5070 .6020 .6970 .7920

X,CY -.4515 -.4929 -.5151 -.5503 -.5423 -.4610

.4566 -.4823 -.5369 -.5698 .0000 -.4475

.4559 -.5050 -.5656 -.5734 -.5279 -.4561

.4522 -.5241 -.5795 -.5776 -.5331 -.4505

.4531 -.5631 -.5939 -.5771 -.5207 -.4405

ALPHA : 21 = -.021 BETA : 31 = 4.247 MACH = .89677 O = 597.91 P = 1062.1 RNL = 3.6486

DEPENDENT VARIABLE CP

Z BY .317C .412C .5070 .6020 .6970 .7920

X,CY -.4932 -.5055 -.5605 -.6341 -.5652 -.4525

.4532 -.5161 -.5797 -.6237 .0000 -.4442

.4523 -.5264 -.6265 -.6181 -.5534 -.4388

.4533 -.5361 -.6280 -.6173 -.5451 -.4364

.4538 -.6195 -.6493 -.6240 -.5345 -.4284

ALPHA : 31 = 3.921 BETA : 11 = -3.870 MACH = .89677 O = 597.91 P = 1062.1 RNL = 3.6354

DEPENDENT VARIABLE CP

Z BY .317C .412C .5070 .6020 .6970 .7920

X,CY -.4913 -.5152 -.5613 -.5047 -.5595 -.4429

.4537 -.5147 -.5855 -.6163 .0000 -.4403

.4521 -.5431 -.6145 -.6227 -.5530 -.4433

.4516 -.5212 -.5391 -.6231 -.5494 -.4215

.4541 -.6202 -.6512 -.6239 -.5328 -.4103

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

A_FFA : 31 = 3.931 BETA (2) = .185 MACH = .89677 0 = 597.91 P = 1062.1 RN/L = 3.6364

SECTION : 1) FLIGHT HAND INSIDE

Z 9: .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.756 -.4650 -.4815 -.5189 -.5634 -.5409 -.4554
.757 -.4693 -.4815 -.5516 -.5840 -.0000 -.4514
.855 -.4339 -.5052 -.5731 -.5826 -.5376 -.4491
.887 -.43915 -.5368 -.5851 -.5906 -.5324 -.4406
.698 -.5139 -.5756 -.6041 -.5845 -.5198 -.4342

ALPHA : 31 = 3.932 BETA (3) = 4.242 MACH = .89677 0 = 597.91 P = 1062.1 RN/L = 3.6364

SECTION : 1) FLIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z 9V .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.757 -.877 -.5260 -.5804 -.6183 -.5681 -.4485
.557 -.5285 -.5281 -.5302 -.6499 -.0000 -.4345
.615 -.5151 -.5511 -.5302 -.6496 -.5535 -.4340
.637 -.5424 -.5325 -.6595 -.6420 -.5454 -.4293
.683 -.5935 -.6413 -.6230 -.6259 -.5413 -.4049

ALPHA : 41 = 7.939 BETA (1) = -3.866 MACH = .89613 0 = 597.48 P = 1062.9 RN/L = 3.6207

SECTION : 1) FLIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z 9V .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758 -.5176 -.5320 -.5959 -.6440 -.5757 -.4397
.557 -.5199 -.5457 -.6333 -.6535 -.0000 -.4342
.615 -.5311 -.5654 -.6637 -.6608 -.5646 -.4392
.637 -.5327 -.6087 -.6885 -.6506 -.5506 -.4155
.653 -.5566 -.6612 -.7025 -.6435 -.5319 -.3930

ALPHA : 41 = 8.006 BETA (2) = -180 MACH = .89613 0 = 597.48 P = 1062.9 RN/L = 3.6207

SECTION : 1) FLIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z 9V .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758 -.4650 -.4843 -.5324 -.5886 -.5388 -.4407
.557 -.4571 -.4822 -.5141 -.5264 -.5974 -.5315 -.4360
.615 -.5244 -.5314 -.5447 -.6128 -.6116 -.5263 -.4310
.637 -.5314 -.5352 -.6153 -.6012 -.5234 -.4179
.653 -.5314 -.5352 -.6153 -.6012 -.5234 -.4129

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TABLED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE (XECR44)						
ALPHA (1) = -3.932	BETA (4) = 4.269	MACH = .59610	Q = 593.75	P = 2387.2	RNL = 4.8840	
SECTION : 1) RIGHT HAND INSIDE X/C/V						
Z/B/	.3170	.4120	.5070	.6020	.6970	.7920
ALPHA (2) = -4.037	BETA (5) = 8.349	MACH = .59610	Q = 593.75	P = 2387.2	RNL = 4.8840	
SECTION : 1) RIGHT HAND INSIDE X/C/V						
Z/B/	.3170	.4120	.5070	.6020	.6970	.7920
ALPHA (2) = -.039	BETA (11) = -7.886	MACH = .59632	Q = 593.95	P = 2386.1	RNL = 4.8783	
SECTION : 1) RIGHT HAND INSIDE X/C/V						
Z/B/	.3170	.4120	.5070	.6020	.6970	.7920
ALPHA (2) = -.052	BETA (21) = -3.866	MACH = .59632	Q = 593.96	P = 2386.1	RNL = 4.8783	
SECTION : 1) RIGHT HAND INSIDE X/C/V						
Z/B/	.3170	.4120	.5070	.6020	.6970	.7920

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TASULATED PRESSURE DATA - OA148 (ANES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE (EXEMPT)									
SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
Z/EV : .3170 .4120 .5070 .6020 .6970 .7920									
X/C/V	- .5692	- .5332	- .7115	- .6924	- .5787	- .4062			
	- .5636	- .6271	- .7395	- .7013	.0000	- .3995			
	- .5942	- .6153	- .7510	- .6939	- .5509	- .3933			
	- .6211	- .6223	- .7772	- .6932	- .5416	- .3876			
	- .6718	- .7715	- .7745	- .6698	- .5230	- .3654			
ALPHA : 2) = .049	BETA : 4) = 8.307	MACH = .248							
SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
Z/EV :	.3170	.4120	.5070	.6020	.6970	.7920			
X/C/V	- .5329	- .5324	- .7173	- .6947	- .5689	- .3912			
	- .6103	- .6154	- .7641	- .7261	.0000	- .3757			
	- .6235	- .6252	- .7767	- .7049	- .5427	- .3658			
	- .6336	- .7593	- .8177	- .6859	- .5000	- .3528			
	- .6617	- .8101	- .8045	- .6616	- .4835	- .3238			
ALPHA : 2) = .34	BETA : 5) = 8.307	MACH = .59632							
SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
Z/EV :	.3170	.4120	.5070	.6020	.6970	.7920			
X/C/V	- .5322	- .7343	- .8879	- .7598	- .5008	- .2874			
	- .6357	- .7858	- .9337	- .7826	.0000	- .2855			
	- .7173	- .6534	- .9385	- .7393	- .4775	- .2605			
	- .6252	- .9101	- .9239	- .7054	- .4501	- .2654			
	- .9777	- .10185	- .8857	- .6359	- .3980	- .2445			
ALPHA : 2) = .349	BETA : 1) = -7.902	MACH = .59694							
SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
Z/EV :	.3170	.4120	.5070	.6020	.6970	.7920			
X/C/V	- .7477	- .7993	- .9378	- .8173	- .5726	- .3464			
	- .7458	- .8172	- .9574	- .8352	.0000	- .3683			
	- .757	- .7459	- .8657	- .8877	- .8140	- .5561	- .3067		
	- .7552	- .8657	- .9355	- .8225	- .7783	- .5009	- .2863		
	- .7773	- .9355	- .9694	- .9295	- .7519	- .4467	- .2623		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\alpha_{\text{PA}} (\text{ 1 }) = 8.025 \quad \text{BETA} (\text{ 1 }) = -7.890 \quad \text{MACH} = .59616 \quad 0 = 593.73 \quad P = 2386.3 \quad RN/L = 4.8652$

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z:1/V .3170 .4120 .5070 .6020 .6970 .7920

 $X/CY -.728 -.6589 -.7144 -.8139 -.6694 -.4226 -.2881$ $.757 -.6595 -.7452 -.8414 -.6822 .0000 -.2669$ $.605 -.6566 -.8027 -.8483 -.6589 -.4057 -.2736$ $.587 -.6525 -.8713 -.8442 -.6404 -.3793 -.2689$ $.552 -.7438 -.8342 -.8576 -.6159 -.3627 -.2718$ $\alpha_{\text{PA}} (\text{ 2 }) = 8.036 \quad \text{BETA} (\text{ 2 }) = -3.859 \quad \text{MACH} = .59616 \quad 0 = 593.73 \quad P = 2386.3 \quad RN/L = 4.8652$

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z:2/V .3170 .4120 .5070 .6020 .6970 .7920

 $X/CY -.5562 -.6195 -.7067 -.6733 -.5190 -.3313$ $.757 -.5513 -.6524 -.7541 -.6967 .0000 -.3363$ $.525 -.5242 -.7573 -.7510 -.6730 -.4254 -.3135$ $.587 -.6162 -.7392 -.7710 -.6695 -.4816 -.3087$ $.568 -.6592 -.6205 -.7625 -.6512 -.4816 -.3122$ $\alpha_{\text{PA}} (\text{ 3 }) = 8.046 \quad \text{BETA} (\text{ 3 }) = .178 \quad \text{MACH} = .59616 \quad 0 = 593.73 \quad P = 2386.3 \quad RN/L = 4.8652$

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z:3/V .3170 .4120 .5070 .6020 .6970 .7920

 $X/CY -.728 -.5841 -.6382 -.7428 -.7038 -.5779 -.3870$ $.757 -.5848 -.6292 -.7464 -.7271 .0000 -.3813$ $.805 -.5950 -.6864 -.7778 -.7124 -.5641 -.3820$ $.897 -.6429 -.7254 -.7878 -.6954 -.5291 -.3677$ $.653 -.6308 -.7395 -.8207 -.6790 -.5222 -.3550$ $\alpha_{\text{PA}} (\text{ 4 }) = 8.059 \quad \text{BETA} (\text{ 4 }) = 4.241 \quad \text{MACH} = .59616 \quad 0 = 593.73 \quad P = 2386.3 \quad RN/L = 4.8652$

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z:4/V .3170 .4120 .5070 .6020 .6970 .7920

 $X/CY -.728 -.5692 -.6237 -.7459 -.6772 -.5048 -.3041$ $.757 -.5932 -.6385 -.7225 -.7074 .0000 -.2993$ $.605 -.6144 -.7042 -.7987 -.6950 -.4838 -.2962$ $.897 -.6551 -.7645 -.8136 -.6475 -.5558 -.2821$ $.568 -.7398 -.8217 -.8154 -.6223 -.4075 -.2597$

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE (XECR44)

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP .708 -.6462 -.7026 -.8229 -.6705 -.4493 -.2723

.757 -.6441 -.7606 -.8363 -.6902 .0000 -.2793

.905 -.6833 -.8265 -.8578 -.6505 -.4228 -.2707

.887 -.7521 -.9128 -.8499 -.5962 -.3847 -.2683

.569 -.8298 -.9389 -.7976 -.5326 -.3452 -.2616

ALPHA (5) = 12.021 BETA (1) = -7.852 MACH = .59616

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP .6792 -.7378 -.8402 -.7100 -.4926 -.3094

.757 -.6785 -.7629 -.8524 -.7250 .0000 -.3115

.805 -.6733 -.8067 -.9789 -.6878 -.4664 -.3068

.887 -.7012 -.8605 -.8785 -.6921 -.4516 -.3028

.958 -.7658 -.8806 -.6696 -.6728 -.4497 -.3033

ALPHA (5) = 11.932 BETA (2) = -3.840 MACH = .59616

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP .6004 -.6310 -.7510 -.6711 -.4977 -.3093

.757 -.5947 -.6424 -.7472 -.6894 .0000 -.3011

.805 -.5935 -.6969 -.7746 -.6742 -.4621 -.3126

.897 -.6359 -.7541 -.7949 -.6515 -.4662 -.2802

.968 -.6250 -.6159 -.7887 -.6425 -.4590 -.2906

ALPHA (5) = 11.946 BETA (3) = .176 MACH = .59616

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP -.5887 -.6420 -.7411 -.7148 -.5780 -.3941

.757 -.6034 -.6544C -.7655 -.7292 .0000 -.3795

.805 -.5182 -.7049 -.8049 -.7330 -.5610 -.3728

.867 -.5623 -.7723 -.8227 -.7072 -.5399 -.3672

.668 -.7171 -.8295 -.8396 -.6823 -.5105 -.3286

ALPHA (5) = 11.946 BETA (3) = .176 MACH = .59616

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (5) = 11.941 BETA (4) = 4.247 MACH = .59616 Q = 593.74 P = 2386.7 RNL = 4.8654

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.738	-.5259	.6529	-.7644	-.6802	-.4964	-.3033
	.757	-.6013	-.5562	-.7942	-.7039	.0000	-.3019
	.625	-.5253	-.7164	-.8133	-.5892	-.4724	-.2843
	.897	-.6731	-.8064	-.8254	-.6508	-.1392	-.2928
	.365	-.7385	-.8532	-.7980	-.6270	-.3975	-.2591

ALPHA (5) = 11.928 BETA (5) = 8.307 MACH = .59616 Q = 593.74 P = 2386.7 RNL = 4.8654

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.738	-.6773	.7076	-.8440	-.7072	-.4728	-.2973
	.757	-.6549	-.7542	-.8738	-.7163	.0000	-.2959
	.625	-.6863	-.8495	-.8926	-.5949	-.4465	-.2864
	.887	-.7834	-.9322	-.8754	-.6365	-.4153	-.2802
	.553	-.6354	-.9305	-.8256	-.5749	-.3728	-.2663

(XEQ044)

(XEQ044)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XEBK45) (13 AUG 75)

REFERENCE DATA

X-CF	=	2390.0000 SQ.FT.	XRP	=	1076.6800 IN. X0
Z-CF	=	474.8000 IN.	YRP	=	.0000 IN. Y0
Z-CF	=	936.0000 IN.	ZRP	=	375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) = -3.961 BETA (1) = -3.852 MACH = .89683 Q = 597.89 P = 1061.9 RN/L = 3.6441

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV					
.708	-	.4661	-	.4748	-
.757	-	.4710	-	.4785	-
.805	-	.4699	-	.4999	-
.887	-	.4703	-	.5235	-
.968	-	.5070	-	.5707	-

ALPHA (1) = -3.932 BETA (2) = .188 MACH = .89683 Q = 597.89 P = 1061.9 RN/L = 3.6441

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV					
.708	-	.4261	-	.4453	-
.757	-	.4410	-	.4710	-
.805	-	.4358	-	.4652	-
.887	-	.4470	-	.5152	-
.968	-	.4692	-	.5152	-

ALPHA (1) = -3.942 BETA (3) = .4.270 MACH = .89683 Q = 597.89 P = 1061.9 RN/L = 3.6441

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV					
.708	-	.4557	-	.4824	-
.757	-	.4567	-	.4791	-
.805	-	.4737	-	.5098	-
.887	-	.4923	-	.5385	-
.968	-	.5195	-	.5722	-

RUDDER =	.000	SFDARK =	55.000
BDFLAP =	22.500	L-ELVN =	4.000
R-ELVN =	4.000	MACH =	.900

?

?

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

ALPHA (+ 2) = .310 BETA (+ 1) = -3.868 MACH = .89560 Q = 597.56 P = 1061.9 RNL = 3.6228

SECTION: 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.759 -.4655 -.4921 -.5344 -.5714 -.5361 -.4427

.757 -.4765 -.4974 -.5509 -.5861 .0000 -.4372

.905 -.4886 -.5151 -.5873 -.5861 -.5254 -.4318

.897 -.4900 -.5573 -.6291 -.5996 -.5209 -.4195

.63 -.5182 -.5953 -.6193 -.5925 -.5069 -.4096

ALPHA (+ 2) = .325 BETA (+ 2) = .185 MACH = .89560 Q = 597.56 P = 1061.9 RNL = 3.6228

SECTION: 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.758 -.4276 -.4572 -.4910 -.5308 -.5106 -.4280

.757 -.4387 -.4585 -.5116 -.5454 .0000 -.4273

.825 -.4477 -.4697 -.5428 -.5483 -.5047 -.4188

.827 -.4557 -.5125 -.5592 -.5578 -.5002 -.4226

.258 -.4827 -.5372 -.5658 -.5580 -.4926 -.4142

ALPHA (+ 2) = .316 BETA (+ 3) = 4.247 MACH = .89560 Q = 597.56 P = 1061.9 RNL = 3.6228

SECTION: 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.4655 -.4678 -.5392 -.5759 -.5352 -.4331

.757 -.4785 -.4882 -.5665 -.5958 .0000 -.4135

.325 -.5157 -.5929 -.5918 -.5264 -.4192

.907 -.5125 -.5643 -.6209 -.5899 -.5205 -.4131

.928 -.5507 -.6118 -.6294 -.5932 -.5069 -.3982

ALPHA (+ 2) = .316 BETA (+ 1) = -3.873 MACH = .89837 Q = 599.08 P = 1060.5 RNL = 3.6099

SECTION: 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.594 -.4380 -.5483 -.5790 -.5293 -.4308

.757 -.4504 -.5053 -.5930 .0000 -.4073

.826 -.4699 -.5135 -.6030 -.6015 -.5314 -.4071

.824 -.5234 -.5512 -.6202 -.6051 -.5227 -.4002

.32 -.5216 -.5143 -.6385 -.6325 -.5073 -.4309

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TABULATED PRESSURE DATA - OAI:8 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

(XEBK45)

$\Delta F \Delta (3) = 4.002$ $BETA (2) = .184$ $MACH = .89837$ $Q = 599.08$ $P = 1060.5$ $RNL = 3.6099$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.4458 -.4559 -.5024 -.5446 -.5152 -.4361
 .757 -.4519 -.4692 -.5266 -.5609 .0000 -.4290
 .805 -.4675 -.4909 -.5548 -.5649 -.5209 -.4302
 .857 -.4801 -.5108 -.5649 -.5749 -.5095 -.4168
 .903 -.4945 -.5617 -.5912 -.5697 -.5074 -.4119

$\text{ALPHA} (3) = 3.937$ $BETA (3) = 4.239$ $MACH = .89837$ $Q = 599.08$ $P = 1060.5$ $RNL = 3.6099$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.4557 -.4901 -.5546 -.5820 -.5335 -.4116
 .757 -.4887 -.5037 -.5877 -.6127 .0000 -.4054
 .805 -.5078 -.5257 -.6120 -.6082 -.5307 -.4045
 .857 -.5187 -.5715 -.6345 -.6044 -.5099 -.3929
 .903 -.5527 -.6210 -.6503 -.5983 -.4935 -.3920

$\text{ALPHA} (4) = 7.970$ $BETA (4) = -3.868$ $MACH = .89753$ $Q = 598.50$ $P = 1061.4$ $RNL = 3.5937$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.4931 -.5054 -.5852 -.6091 -.5513 -.4050
 .757 -.5042 -.5175 -.6015 -.6159 .0000 -.4024
 .805 -.5033 -.5458 -.5301 -.6280 -.5347 -.4053
 .857 -.5123 -.5361 -.6544 -.6261 -.5253 -.3941
 .903 -.5506 -.6335 -.6835 -.6136 -.5151 -.3789

$\text{ALPHA} (4) = 7.979$ $BETA (2) = .177$ $MACH = .89753$ $Q = 598.50$ $P = 1061.4$ $RNL = 3.5937$

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.4455 -.4724 -.5158 -.5558 -.5196 -.4282
 .757 -.4539 -.4763 -.5376 -.5757 .0000 -.4180
 .805 -.4638 -.4916 -.5321 -.5693 -.5073 -.4139
 .857 -.4762 -.5174 -.5915 -.5797 -.5118 -.4074
 .903 -.5052 -.5912 -.6017 -.5702 -.4902 -.3873

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TABULATED PRESSURE DATA - OAIHB (AMES 11-073-1)

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ALPHA (+) = 7.978 BETA (+ 3) = 4.243 MACH = .89753 0 = 598.50 P = 1061.4 RN/L = 3.5937

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X,CV

.758	-4.4248	-.5194	-.5853	-.6048	-.5470	-.4013
.757	-4.5555	-.5242	-.6128	-.6192	.0000	-.3899
.805	-5.050	-.5450	-.6353	-.6223	.5162	-.3980
.387	-5.424	-.6C+5	-.6678	-.6157	.5055	-.3955
.358	-5.772	-.6553	-.6694	-.6119	-.4957	-.3718

ALPHA (+ 5) = 11.950 BETA (+ 1) = -3.856 MACH = .89653 0 = 597.97 P = 1062.9 RN/L = 3.5856

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X,CV

.758	-6.261	-.5532	-.6118	-.6433	-.5621	-.4480
.757	-5.5237	-.5670	-.6389	-.6475	.0000	-.4454
.805	-5.438	-.5738	-.6698	-.6513	.5440	-.4430
.387	-5.593	-.6318	-.6356	-.6546	.5455	-.4249
.358	-5.633	-.6337	-.6579	-.6501	-.5332	-.4129

ALPHA (+ 5) = 11.961 BETA (+ 2) = 1.78 MACH = .89653 0 = 597.97 P = 1062.9 RN/L = 3.5856

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X,CV

.758	-4.751	-.5245	-.5652	-.5987	-.5399	-.4233
.757	-4.927	-.5194	-.5804	-.6105	.0000	-.4281
.805	-5.022	-.5149	-.6149	-.6193	.5304	-.4207
.387	-5.157	-.5725	-.6556	-.6163	.5145	-.4084
.358	-5.644	-.6221	-.6559	-.6033	-.5117	-.4008

ALPHA (+ 5) = 11.950 BETA (+ 3) = 4.259 MACH = .89653 0 = 597.97 P = 1062.9 RN/L = 3.5856

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X,CV

.758	-5.284	-.5554	-.6251	-.6281	-.5554	-.4281
.757	-5.357	-.5544	-.6616	-.6521	.0000	-.4160
.805	-5.535	-.5932	-.6936	-.6499	-.5183	-.4108
.387	-5.639	-.6523	-.7387	-.6547	-.5186	-.3396
.358	-5.667	-.6295	-.7180	-.6262	-.5179	-.3606

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

(XEBR06) (13 AUG 75) PAGE 6351

REFERENCE DATA

Z/EF = 2590.0000 52.FT.	XNRP = 1076.6900 IN. X0
+7.4 3200 IN.	YNRP = .0000 IN. Y0
5.2EF = 935.1530 IN.	ZNRP = 375.0000 IN. Z0

S/ELV = .0530	
ALPHA (1) = -4.CB1	BETA (1) = -7.851

SECTION : LEFT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY = -.6395	-.6595	-.7831	-.7341	-.5675	-.3931
.757	-.6174	-.6879	-.7981	-.7554	-.0000

.825	-.5501	-.7152	-.6520	-.7184	-.5559
.887	-.6627	-.7541	-.8235	-.7119	-.5279

.662	-.7115	-.8451	-.8353	-.6917	-.5333
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ALPHA (1) = -3.953	BET1 (2) = -3.833	MACH = .59592
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SECTION : RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY = -.5311	-.5677	-.6603	-.6415	-.5577	-.4069
.757	-.5479	-.5755	-.6717	-.6550	-.0000

.825	-.5543	-.6091	-.7075	-.6527	-.5284
.887	-.5713	-.6505	-.7261	-.6448	-.5134

.958	-.6197	-.7059	-.77318	-.6436	-.5029
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ALPHA (1) = -3.951	BET1 (3) = .188	MACH = .59592
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SECTION : RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY = -.5073	-.5432	-.6363	-.6278	-.5395	-.3979
.757	-.5269	-.5653	-.6577	-.5587	-.0000

.825	-.5337	-.5934	-.6937	-.6461	-.5321
.887	-.5522	-.6565	-.7039	-.6316	-.5085

.958	-.5122	-.7124	-.7282	-.6206	-.5000
------	--------	--------	--------	--------	--------

ALPHA (1) = -3.951	BET1 (3) = .188	MACH = .59592
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SECTION : LEFT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY = -.5073	-.5432	-.6363	-.6278	-.5395	-.3979
.757	-.5269	-.5653	-.6577	-.5587	-.0000

.825	-.5337	-.5934	-.6937	-.6461	-.5321
.887	-.5522	-.6565	-.7039	-.6316	-.5085

.958	-.5122	-.7124	-.7282	-.6206	-.5000
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TABULATED PRESSURE DATA - OR148 (AMES 11-073-1)

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AMES 11-073(OR148) - 140A/B/C/R ORB SPEED BRAKE
SECTION: (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, BV .3170 .4120 .5070 .6020 .6970 .7920

X, CV

.758	- .5327	- .3501	- .6661	- .6373	- .5388	- .3956
.757	- .5663	- .5719	- .6728	- .6559	- .0000	- .3902
.805	- .5596	- .6259	- .7042	- .6471	- .5253	- .3849
.897	- .5988	- .6835	- .7218	- .6452	- .5117	- .3709
.968	- .6380	- .7229	- .7294	- .6204	- .4775	- .3579

ALPHA (1) = - 3.973 BETA (4) = 4.269 MACH = .59592 0 = 593.39 P = 2387.4 RN/L = 4.8516

SECTION: (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, BV .3170 .4120 .5070 .6020 .6970 .7920

X, CV

.758	- .6622	- .6822	- .7624	- .7020	- .5373	- .3587
.757	- .6277	- .6717	- .7988	- .7305	- .0000	- .3539
.805	- .5512	- .7382	- .8293	- .7160	- .5224	- .3519
.897	- .7133	- .6889	- .9350	- .6922	- .5057	- .3305
.956	- .7549	- .8770	- .8349	- .6649	- .4460	- .3003

ALPHA (2) = .650 BETA (1) = - 7.888 MACH = .59634 0 = 594.08 P = 2386.3 RN/L = 4.8479

SECTION: (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, BV .3170 .4120 .5070 .6020 .6970 .7920

X, CV

.758	- .7333	- .7845	- .9063	- .8228	- .5942	- .3478
.757	- .7177	- .7784	- .9355	- .8407	- .0000	- .3418
.805	- .7429	- .8204	- .9734	- .8161	- .5589	- .3298
.897	- .7810	- .9304	- .9153	- .7918	- .5246	- .3016
.956	- .8162	- .9661	- .9771	- .7565	- .4833	- .2802

ALPHA (2) = - 2.000 BETA (2) = - 3.865 MACH = .59634 0 = 594.08 P = 2386.3 RN/L = 4.8479

SECTION: (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z, BV .3170 .4120 .5070 .6020 .6970 .7920

X, CV

.758	- .6528	- .5622	- .7077	- .6649	- .5519	- .3897
.757	- .6750	- .6124	- .7241	- .6988	- .0000	- .3764
.805	- .6254	- .6235	- .7735	- .6830	- .5341	- .3693
.897	- .6824	- .6592	- .7354	- .6825	- .5172	- .3490
.956	- .6516	- .6516	- .7751	- .6560	- .5018	- .3556

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TABULATED PRESSURE DATA - OA148 (APES 11-073-1)

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SECTION (1) RIGHT HAND INSIDE		DEFENDANT VARIABLE CP		(XEBR46)						
Z, BV	.3170	.4120	.5070	.6020	.6970					
X/CY	.758 .757 .755 .7506 .757 .757 .758	-.5394 -.5449 -.5206 -.6034 -.6501	-.5777 -.5854 -.5211 -.6993 -.7577	-.6999 -.7144 -.7474 -.7603 -.7591	-.6683 -.6930 -.6792 -.6658 -.6576	-.5603 -.0000 -.5496 -.5308 -.5023	-.3943 -.3898 -.3836 -.3663 -.3427	MACH = .594.08	P = 2386.3	RNL = 4.8479
ALPHA (2)	= .059	BETA (4)	= 4.248	MACH = .59634	0	= 594.08	P = 2386.3	RNL = 4.8479		
SECTION (1) RIGHT HAND INSIDE		DEFENDANT VARIABLE CP								
Z, BV	.3170	.4120	.5070	.6020	.6970	.7920				
X/CY	.758 .757 .755 .7506 .757 .757 .758	-.5716 -.5845 -.5823 -.5438 -.5932	-.6142 -.6392 -.7223 -.7299 -.7597	-.7251 -.7578 -.7735 -.7967 -.7897	-.6771 -.6949 -.7309 -.6748 -.6456	-.5459 -.0000 -.5201 -.4999 -.4750	-.3656 -.3577 -.3611 -.3540 -.3267	MACH = .59634	0	2386.3
ALPHA (2)	= .053	BETA (5)	= 8.306	MACH = .59634	0	= 594.08	P = 2386.3	RNL = 4.8479		
SECTION (1) RIGHT HAND INSIDE		DEFENDANT VARIABLE CP								
Z, BV	.3170	.4120	.5070	.6020	.6970	.7920				
X/CY	.759 .757 .755 .757 .757 .757 .758	-.6657 -.6786 -.6368 -.6359 -.7816 -.6512	-.7126 -.7564 -.6397 -.7918 -.3678 -.6253	-.8643 -.8989 -.9258 -.7134 -.3123 -.9025	-.7524 -.7709 -.7498 -.7134 -.4497 -.6415	-.5236 -.0000 -.4792 -.4497 -.4013 -.2403	-.2989 -.2772 -.2846 -.2610 -.2403	MACH = .59704	0	2386.0
ALPHA (3)	= 4.012	BETA (1)	= -7.901	MACH = .59704	0	= 595.39	P = 2386.0	RNL = 4.8459		
SECTION (1) RIGHT HAND INSIDE		DEFENDANT VARIABLE CP								
Z, BV	.3170	.4120	.5070	.6020	.6970	.7920				
X/CY	.759 .757 .755 .757 .757 .757 .758	-.7293 -.7295 -.8577 -.8503 -.7624 -.8087	-.7873 -.8077 -.9479 -.9542 -.9324 -.9793	-.9257 -.8479 -.8403 -.8129 -.7824 -.9827	-.8203 -.8403 -.0000 -.5473 -.5082 -.7561	-.5925 -.0000 -.2917 -.4471 -.2620	-.3304 -.3356 -.2987 -.2917	MACH = .595.39	P = 2386.0	RNL = 4.8459

AMES 11-073(OAI48) - 140A/B/C/R CRB SPEED BRAKE

(XEBR06)

$$\text{ALPHA} (3) = 4.016 \quad \text{BETA} (2) = -3.862 \quad \text{MACH} = .59704 \quad Q = 595.39 \quad P = 2386.0 \quad R/L = 4.8469$$

SECTION: 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/E	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.758	-.5737	-.6171	-.7099	-.6508	-.4973	-.3420
.757	-.5747	-.6238	-.7419	-.6881	.0000	-.3223
.655	-.5914	-.6932	-.7633	-.6752	-.5016	-.3159
.657	-.6216	-.7461	-.7682	-.6522	-.5028	-.3108
.659	-.6341	-.8038	-.7754	-.6501	-.4760	-.3061

$$\alpha_{-P44} (3) = 4.027 \quad \text{BETA} (3) = .191 \quad \text{MACH} = .59704 \quad Q = 595.39 \quad P = 2386.0 \quad R/L = 4.8469$$

SECTION: 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/E	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.758	-.5831	-.5822	-.6961	-.6781	-.5768	-.4040
.757	-.6746	-.6199	-.7263	-.7033	.0000	-.3907
.655	-.6862	-.6439	-.7445	-.6943	-.5528	-.3893
.657	-.6214	-.7054	-.7698	-.6905	-.5274	-.3516
.659	-.6339	-.7521	-.7559	-.6722	-.5115	-.3543

$$\alpha_{-P44} (3) = 4.030 \quad \text{BETA} (4) = 4.239 \quad \text{MACH} = .59704 \quad Q = 595.39 \quad P = 2386.0 \quad R/L = 4.8469$$

SECTION: 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/E	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.758	-.5234	-.5525	-.7532	-.6540	-.4837	-.3008
.757	-.5971	-.5697	-.7727	-.6917	.0000	-.2961
.655	-.6143	-.7037	-.6319	-.5758	-.4676	-.2843
.657	-.6535	-.7767	-.8054	-.6391	-.4335	-.2711
.659	-.6217	-.9345	-.7898	-.5183	-.3982	-.2588

$$\alpha_{-P44} (3) = 4.035 \quad \text{BETA} (5) = 8.289 \quad \text{MACH} = .59704 \quad Q = 595.39 \quad P = 2386.0 \quad R/L = 4.8469$$

SECTION: 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/E	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.758	-.6231	-.7352	-.5053	-.7625	-.5104	-.2929
.757	-.6978	-.7891	-.9217	-.7785	.0000	-.2869
.655	-.7145	-.8226	-.8425	-.7448	-.4746	-.2895
.657	-.7364	-.6584	-.9130	-.7543	-.4229	-.2549
.659	-.6345	-.1023	-.8895	-.6375	-.4001	-.2395

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

ALPHA (41) = 7.936 BETA (1) = -7.892 MACH = .59670 0 = 594.93 P = 2387.1 RNL = 4.8E10

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .739 -.6753 -.7241 -.8279 -.6797 -.4483 -.2877

.757 -.5556 -.7543 -.8479 -.7151 .0000 -.2860

.825 -.6705 -.7319 -.8570 -.6759 -.4412 -.2882

.887 -.6932 -.8515 -.8655 -.6456 -.4108 -.2834

.928 -.7604 -.9353 -.8518 -.6332 -.3900 -.2819

ALPHA (41) = 9.007 BETA (2) = -3.861 MACH = .59670 0 = 594.93 P = 2387.1 RNL = 4.8E10

SECTION 1: RIGHT H.A.C INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.5693 -.6076 -.5976 -.6534 -.5127 -.3293

.757 -.5704 -.6255 -.7285 -.6704 .0000 -.3229

.805 -.5714 -.6582 -.7531 -.6621 -.4779 -.3168

.897 -.6932 -.7147 -.7586 -.6528 -.4579 -.3046

.959 -.6512 -.7743 -.7707 -.6483 -.4624 -.3058

ALPHA (41) = 8.012 BETA (3) = .176 MACH = .59670 0 = 594.93 P = 2387.1 RNL = 4.8E10

SECTION 1: RIGHT H.A.C INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.5625 -.5555 -.7038 -.6848 -.5726 -.3950

.757 -.5787 -.6395 -.7374 -.7043 .0000 -.3746

.805 -.5554 -.6557 -.7692 -.6548 -.5385 -.3762

.897 -.6150 -.7186 -.7808 -.6808 -.5302 -.3531

.928 -.6807 -.7751 -.7753 -.6730 -.5065 -.3388

ALPHA (41) = 8.012 BETA (4) = .4240 MACH = .59670 0 = 594.93 P = 2387.1 RNL = 4.8E10

SECTION 1: RIGHT H.A.C INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.5748 -.6233 -.7749 -.5773 -.5635 -.3154

.757 -.5648 -.6257 -.7749 -.7014 .0003 -.2941

.805 -.6145 -.6850 -.7948 -.6879 -.4832 -.2838

.897 -.6035 -.7750 -.8019 -.6571 -.4473 -.2794

.928 -.7152 -.8232 -.7930 -.6293 -.4273 -.2613

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R QRB SPEED BRAKE

(XEBK45)

$$\text{ALPHA} / 5 = 8.009 \quad \text{BETA} / 5 = 8.233 \quad \text{MACH} = .59570 \quad 0 = 594.93 \quad P = 2387.1 \quad \text{RNL} = 4.8410$$

SECTION: 1. RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/8/ 3170 .4120 5070 .6020 .6970 .7920

X/CY

.759	-.6329	-.7005	-.8073	-.6993	-.4595	-.2811
.757	-.6265	-.7314	-.8392	-.6928	.0000	-.2626
.805	-.6545	-.8139	-.8625	-.6542	-.4232	-.2586
.887	-.7521	-.8345	-.8572	-.6379	-.3877	-.2612
.368	-.8213	-.9171	-.8046	-.5708	-.3668	-.2526

$$\text{ALPHA} / 5 = 11.987 \quad \text{BETA} / 5 = -7.852 \quad \text{MACH} = .59692 \quad 0 = 595.28 \quad P = 2386.8 \quad \text{RNL} = 4.8363$$

SECTION: 1. RIGTH HAND INSIDE

DEPENDENT VARIABLE CP

Z/8/ 3170 .4120 5070 .6020 .6970 .7920						
X/CY						
.759	-.6953	-.7166	-.8253	-.6802	-.4823	-.3004
.757	-.6951	-.7481	-.8288	-.7046	.0000	-.2928
.805	-.6925	-.7782	-.8560	-.5942	-.4666	-.2909
.887	-.6825	-.8435	-.8590	-.5897	-.4553	-.2817
.368	-.7338	-.8935	-.8400	-.6655	-.4458	-.2939

$$\text{ALPHA} / 5 = 12.508 \quad \text{BETA} / 5 = -3.842 \quad \text{MACH} = .59692 \quad 0 = 595.28 \quad P = 2386.8 \quad \text{RNL} = 4.8363$$

SECTION: 1. RIGCHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/8/ 3170 .4120 5070 .6020 .6970 .7920

X/CY

.759	-.5819	-.6101	-.7213	-.6558	-.5113	-.3080
.757	-.5739	-.6262	-.7489	-.6724	.0000	-.3042
.805	-.5798	-.6742	-.7595	-.6635	-.4657	-.2903
.887	-.5929	-.7226	-.8226	-.7202	-.4535	-.2809
.368	-.6213	-.8130	-.8400	-.6238	-.4428	-.2956

$$\text{ALPHA} / 5 = 13.016 \quad \text{BETA} / 5 = -1.217 \quad \text{MACH} = .59692 \quad 0 = 595.28 \quad P = 2386.8 \quad \text{RNL} = 4.8363$$

SECTION: 1. RIGCHT INSIDE

DEPENDENT VARIABLE CP

Z/8/ 3170 .4120 5070 .6020 .6970 .7920

X/CY

.759	-.5745	-.6357	-.7224	-.7034	-.5715	-.3830
.757	-.5741	-.6240	-.7536	-.7172	.0000	-.2886
.805	-.5835	-.6744	-.7934	-.7322	-.5422	-.3551
.887	-.6029	-.7325	-.8325	-.7825	-.5282	-.3671
.368	-.6324	-.8225	-.8500	-.6328	-.4524	-.3024

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(DA148) - 140A/B/C/R ORB SPEED BRAKE

ANGLE OF INCIDENCE : 11.317 BETA (4) = 4.245 MACH = .59692 Q = 595.28 P = 2386.8 RNL = 4.8353

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z (Y) : .5070 .4070 .6020 .6970 .7920

X (Z) : -.59392 -.62347 -.7114 -.6769 -.5346 -.3261

Y (X) : -.53514 -.56369 -.7840 -.7094 -.0000 -.3092

Z (X) : -.61115 -.61561 -.7810 -.6876 -.4905 -.2919

Y (Z) : -.66173 -.66322 -.8054 -.6633 -.4727 -.2884

X (Y) : -.63535 -.63511 -.7357 -.6416 -.4281 -.2792

ANGLE OF INCIDENCE : 11.304 BETA (5) = 8.309 MACH = .59692 Q = 595.28 P = 2386.8 RNL = 4.8353

SECTION : LEFT HAND INSIDE DEPENDENT VARIABLE CP

Z (Y) : .3070 .4070 .6020 .6970 .7920

X (Z) : -.5957 -.6973 -.8153 -.7063 -.4921 -.2847

Y (X) : -.53563 -.53535 -.7285 -.6183 -.7353 -.0000 -.2826

Z (X) : -.61259 -.61255 -.81255 -.80552 -.6853 -.4433 -.2852

Y (Z) : -.66233 -.66231 -.82237 -.87022 -.6593 -.4095 -.2802

X (Y) : -.63216 -.63215 -.82235 -.82233 -.5973 -.3697 -.2628

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TABULATED PRESSURE DATA - ORIG - ARES 11-073-1)

ARES 11-1 - 4148; 140A/B/C/R ONE SPEED BRAKE

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F. EXERCISE DATA

PARAMETRIC DATA						
LSPRF = 2030.000 SQ.FT.	XNP = 1076.68		RUDDER = -10.000	SPDRBK =	65.000	
LSPCF = 47.823 IN.	YNP = .00		BUFLAP = 16.200	L-ELVN =		
ZNP = 375.03			R-ELVN = 4.000	MACH = 1.400		
SURFACE = 355.330						
ALPHA (1) = -4.021	BETA (1) = -3					
SECTION (1) RIGHT HAND INSIDE						
Z/EV .3:7C .4:20 .5070 .6020						
X/CY						
.708 -.6155 -.6147 -.6199 -.6263 -.6266						
.757 -.6123 -.6142 -.6239 -.6253 -.6003						
.805 -.6121 -.6158 -.6256 -.6256 -.6150						
.897 -.6121 -.6195 -.6282 -.6249 -.6100						
.969 -.6136 -.6243 -.6272 -.6223 -.5350						
ALPHA (1) = -4.015	BETA (2) = .189	MACH = 1.3993	O = 600.40	P = 438.06	RNL = 2.9180	
SECTION (1) RIGHT HAND INSIDE						
Z/EV .3:7C .4:20 .5070 .6020 .6970 .7920						
X/CY						
.708 -.6093 -.6236 -.6090 -.6118 -.6081						
.757 -.6027 -.6252 -.6121 -.6107 -.0000						
.805 -.6036 -.6076 -.6128 -.6114 -.6078						
.897 -.6055 -.6088 -.6121 -.6114 -.6064						
.968 -.6072 -.6117 -.6118 -.6093 -.6017						
ALPHA (1) = -4.023	BETA (3) = .4275	MACH = 1.3993	O = 600.40	P = 438.06	RNL = 2.9180	
SECTION (1) RIGHT HND INSIDE						
Z/EV .3:7C .4:20 .5070 .6020 .6970 .7920						
X/CY						
.708 -.5642 -.5320 -.5949 -.5980 -.5954						
.757 -.5920 -.5920 -.5959 -.5980 .0000						
.825 -.5312 -.5935 -.5975 -.5980 -.5955						
.897 -.5327 -.5944 -.5973 -.5980 -.5944						
.968 -.5333 -.6004 -.5960 -.5970 -.5895						

-

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C₂ .728 -.6160 -.6131 -.6182 -.6260 -.6189 -.6028

.757 -.6122 -.6134 -.6234 -.6255 -.0000 -.6043

.635 -.5122 -.6153 -.6243 -.6260 -.6168 -.6017

.897 -.6131 -.6160 -.6262 -.6238 -.6139 -.5946

.958 -.5141 -.6216 -.6276 -.6224 -.6280 -.5840

ALPHA 1 (2) = -.002 BETA 1 (2) = .186 MACH = 1.3999

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C₂ .708 -.6162 -.6113 -.6140 -.6168 -.6149 -.6039

.757 -.6299 -.5127 -.6173 -.6164 -.0000 -.6055

.805 -.6138 -.6136 -.6180 -.6164 -.6142 -.6041

.887 -.6125 -.6142 -.6171 -.6164 -.6131 -.5979

.958 -.6135 -.6182 -.6171 -.6154 -.6088 -.5851

ALPHA 1 (2) = -.007 BETA 1 (3) = .4251 MACH = 1.3999

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C₂ .708 -.5036 -.6255 -.6384 -.6105 -.6082 -.6016

.757 -.6363 -.6263 -.6108 -.6108 -.0000 -.6030

.625 -.6255 -.6263 -.6112 -.6110 -.6389 -.6025

.897 -.6355 -.6148 -.6109 -.6098 -.6082 -.6024

.958 -.5033 -.6149 -.6112 -.6101 -.6032 -.5932

ALPHA 1 (3) = .3.927 BETA 1 (1) = -.3.876 MACH = 1.3955

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C₂ .708 -.6154 -.6129 -.6184 -.6241 -.6179 -.6012

.757 -.6114 -.6140 -.6217 -.6229 -.0000 -.6026

.625 -.6119 -.6156 -.6241 -.6235 -.6163 -.6009

.897 -.6133 -.6212 -.6262 -.6236 -.6130 -.5961

.958 -.6147 -.6255 -.6269 -.6219 -.6087 -.5841

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (3) = 3.927 BETA (2) = .191 MACH = 1.3955 Q = 600.04 P = 440.18 RNL = 2.9202

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.728	- .6093	- .6044	- .6091	- .6105	- .6069	- .5968
.757	- .6039	- .6053	- .6114	- .6098	- .0000	- .5987
.805	- .6037	- .6055	- .6121	- .6105	- .6067	- .5973
.887	- .6053	- .6096	- .6112	- .6100	- .6053	- .5923
.958	- .6063	- .6122	- .6107	- .6079	- .6003	- .5810

ALPHA (3) = 3.930 BETA (3) = 4.244 MACH = 1.3955 Q = 600.04 P = 440.18 RNL = 2.9202

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.753	- .6111	- .5380	- .6128	- .6151	- .6111	- .6017
.757	- .6076	- .6097	- .6158	- .6146	- .0000	- .6038
.805	- .6083	- .6106	- .6165	- .6156	- .6123	- .6028
.887	- .6094	- .6159	- .6158	- .6144	- .6111	- .6005
.958	- .6104	- .6192	- .6156	- .6142	- .6066	- .5891

ALPHA (4) = 7.863 BETA (1) = - 3.871 MACH = 1.3954 Q = 600.24 P = 440.41 RNL = 2.9228

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.758	- .6116	- .6080	- .6109	- .6140	- .6100	- .6017
.757	- .6080	- .6099	- .6159	- .6135	- .0000	- .6032
.805	- .6273	- .6101	- .6168	- .6133	- .6100	- .6024
.887	- .6035	- .6152	- .6164	- .6121	- .6083	- .5986
.958	- .6101	- .6168	- .6143	- .6107	- .6036	- .5868

ALPHA (4) = 7.934 BETA (2) = 1.74 MACH = 1.3954 Q = 600.24 P = 440.41 RNL = 2.9228

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.758	- .5041	- .5984	- .6025	- .6039	- .6008	- .5888
.757	- .5987	- .5939	- .6046	- .6043	- .0000	- .5897
.805	- .5999	- .6013	- .6252	- .6039	- .6003	- .5893
.887	- .6022	- .6044	- .5058	- .6041	- .5984	- .5857
.958	- .6020	- .6065	- .6039	- .6017	- .5944	- .5753

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TESTED PRESSURE DATA - QAL4B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

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SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (5) = 11.867 BETA (3) = 4.239 MACH = 1.3954

P = 600.34 RPNL = 440.41

RPNL = 2.9228

X/CV .703 -.6151 -.6118 -.6187 -.6242 -.6197 -.6027

.705 -.6106 -.6139 -.6225 -.6234 .0000 -.6048

.805 -.6106 -.6156 -.6234 -.6239 -.6180 -.6027

.887 -.6137 -.6219 -.6251 -.6232 -.6161 -.5992

.958 -.6146 -.6254 -.6251 -.6218 -.6123 -.5911

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (5) = 11.873 BETA (2) = 4.176 MACH = 1.3955

P = 600.34 RPNL = 440.41

RPNL = 2.9245

X/CV .708 -.6039 -.5985 -.6017 -.6036 -.5010 -.5916

.757 -.5989 -.6075 -.6031 -.6045 .0000 -.5918

.825 -.5959 -.5989 -.6048 -.6048 -.6009 -.5913

.887 -.5996 -.6055 -.6036 -.6036 -.6000 -.5928

.958 -.5996 -.6077 -.6036 -.6036 -.6008 -.5848

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

ALPHA (5) = 11.868 BETA (3) = 4.257 MACH = 1.3955

P = 600.34 RPNL = 440.41

RPNL = 2.9245

X/CV .708 -.6117 -.6084 -.6177 -.6250 -.6177 -.5965

.757 -.6103 -.6058 -.6222 -.6241 .0000 -.5903

.825 -.5954 -.6143 -.6248 -.6255 -.6156 -.5948

.887 -.6138 -.6225 -.6272 -.6274 -.6120 -.5899

.958 -.6150 -.6255 -.6250 -.6205 -.6102 -.5759

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TABULATED PRESSURE DATA - OA149 (AMES 11-073-1)

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AMES 11-073(OA149) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (S) = 15.839 BETA (1) = -3.834 MACH = 1.3943 Q = 600.32 P = 441.12 RNL = 2.9229

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z.BY .3170 .4120 .5070 .6020 .6970 .7920

X.CV

.706	-.6121	-.6293	-.6106	-.6132	-.6108	-.6040
.757	-.6092	-.6061	-.6137	-.6130	-.6000	-.6047
.805	-.6085	-.6053	-.6137	-.6134	-.6113	-.6042
.887	-.6092	-.6142	-.6144	-.6127	-.6113	-.6029
.959	-.6089	-.6154	-.6132	-.6104	-.6059	-.5989

ALPHA (6) = 15.851 BETA (2) = .174 MACH = 1.3943 Q = 600.32 P = 441.12 RNL = 2.9229

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z.BY .3170 .4120 .5070 .6020 .6970 .7920

X.CV

.729	-.6051	-.6027	-.6091	-.6146	-.6091	-.5938
.757	-.6034	-.6030	-.6124	-.6134	-.6000	-.5935
.805	-.6034	-.6059	-.6149	-.6141	-.6079	-.5919
.887	-.6053	-.6133	-.6167	-.6134	-.6053	-.5899
.959	-.6056	-.6164	-.6157	-.6120	-.5999	-.5825

ALPHA (6) = 15.843 BETA (3) = 4.293 MACH = 1.3943 Q = 600.32 P = 441.12 RNL = 2.9229

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z.BY .3170 .4120 .5070 .6020 .6970 .7920

X.CV

.719	-.5216	-.5193	-.6270	-.6343	-.6256	-.5999
.757	-.6176	-.6216	-.5315	-.6325	-.6000	-.5999
.805	-.6176	-.6239	-.6322	-.6343	-.6221	-.5996
.887	-.5197	-.6293	-.6331	-.6313	-.6199	-.5947
.959	-.6203	-.6328	-.6336	-.6254	-.6171	-.5843

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TABULATED PRESSURE DATA - CA148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

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(XEBRA4B) (13 AUG 75)

REFERENCE DATA

X _{REF}	=	2862.0000	SQ.FT.	X _{MRP}	=	1076.6800	IN. X0	RUDDER	=	-10.000	SPDBRK	=	65.000
Z _{REF}	=	4.745632	IN.	Y _{MRP}	=	.0000	IN. Y0	BGFLAP	=	16.300	L-ELVN	=	4.000
Z _{REF}	=	239.539	IN.	Z _{MRP}	=	375.0000	IN. Z0	R-ELVN	=	4.000	MACH	=	1.250

$\alpha_{-PHI} : \beta_1 = -4.02 + \text{BETA } (1) = -3.849$ MACH = 1.2475 DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/EV .769 -.7235 -.7224 -.7352 -.7413 -.7356 -.6905

.557 -.7196 -.7276 -.7378 -.7434 -.0000 -.6922

.515 -.7131 -.7297 -.7420 -.7425 -.7263 -.8877

.637 -.7123 -.7467 -.7422 -.7404 -.7203 -.6806

.393 -.7335 -.7418 -.7394 -.7392 -.7196 -.6655

$\alpha_{-PHI} : \beta_2 = -4.306$ BETA $(2) = .189$ MACH = 1.2475 DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/EV .738 -.7213 -.7138 -.7220 -.7250 -.7135 -.7026

.557 -.7156 -.7203 -.7253 -.7224 -.0000 -.7045

.325 -.7177 -.7227 -.7260 -.7249 -.7177 -.7084

.387 -.7201 -.7251 -.7257 -.7243 -.7146 -.7024

.356 -.7222 -.7249 -.7248 -.7203 -.7064 -.6839

$\alpha_{-PHI} : \beta_3 = -4.015$ BETA $(3) = .4.273$ MACH = 1.2475 DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/EV .728 -.8355 -.6345 -.7340 -.7289 -.7023 -.6796

.757 -.6913 -.5361 -.7075 -.7096 -.0000 -.6794

.625 -.6225 -.6393 -.7094 -.7089 -.7002 -.6784

.287 -.5934 -.7073 -.7101 -.7104 -.6383 -.6755

.659 -.6938 -.7254 -.7113 -.7068 -.6896 -.6676

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REGULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 1) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = .020 \quad \text{BETA} + 2) = .169 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 3) = 4.249 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = 3.951 \quad \text{BETA} + 4) = -3.873 \quad \text{MACH} = 1.2462 \quad 0 = 600.16 \quad P = 552.05 \quad \text{RN/L} = 3.0252$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 5) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 6) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = 3.951 \quad \text{BETA} + 7) = -3.873 \quad \text{MACH} = 1.2462 \quad 0 = 600.16 \quad P = 552.05 \quad \text{RN/L} = 3.0252$$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 8) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 9) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 10) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 11) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 12) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$\alpha_{\text{beta}} + \beta_1 = -0.012 \quad \text{BETA} + 13) = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad \text{RN/L} = 3.0247$$

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TABULATED PRESSURE DATA - OA148 (AMES 11-373-1)

AMES 11-373(OA148) -140A/B/C/R SPEED BRAKE

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$\alpha_{-P-4} + \beta_1 = 3.350$ $\text{BETA } (2) = .185$ $\text{MACH } = 1.2462$ $C = 600.16$ $P = 552.05$ $RN/L = 3.0262$

SECTION : UPRIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/31 .3170 .4120 .5070 .6020 .6970 .7920

α_{-C-7}
 .123 -.6876 -.6943 -.6947 -.6954 -.6953 -.6664
 .157 -.6952 -.6930 -.6923 -.6958 .0000 -.6725
 .185 -.6349 -.6233 -.6233 -.6004 -.6876 -.6718
 .187 -.6232 -.5272 -.6232 -.6930 -.6970 -.6568
 .188 -.6337 -.6551 -.6551 -.6970 -.6902 -.6715 -.6491

$\alpha_{-D-4} + \beta_1 = 3.354$ $\text{BETA } (3) = 4.240$ $\text{MACH } = 1.2462$ $C = 600.16$ $P = 552.05$ $RN/L = 3.0262$

SECTION : UPRIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/31 .3170 .4120 .5070 .6020 .6970 .7920

α_{-C-7}
 .123 -.7631 -.6939 -.7153 -.7196 -.7101 -.6783
 .157 -.6939 -.7013 -.7199 -.7200 .0000 -.6778
 .185 -.6375 -.7111 -.7252 -.7215 -.7061 -.6806
 .187 -.7331 -.7193 -.7278 -.7212 -.7002 -.6733
 .188 -.7232 -.7254 -.7276 -.7163 -.6929 -.6582

$\alpha_{-D-4} = 7.395$ $\text{BETA } (1) = -3.659$ $\text{MACH } = 1.2462$ $C = 600.16$ $P = 552.05$ $RN/L = 3.0273$

SECTION : UPRIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/31 .3170 .4120 .5070 .6020 .6970 .7920

α_{-C-7}
 .123 -.6478 -.6463 -.5575 -.6604 -.6483 -.6271
 .157 -.5350 -.6513 -.6563 -.6655 .0000 -.6323
 .185 -.5437 -.6325 -.6544 -.6650 -.6490 -.6323
 .187 -.6226 -.6326 -.6579 -.6648 -.6448 -.6199
 .189 -.5493 -.6663 -.6658 -.6590 -.6351 -.6029

$\alpha_{-D-4} = 8.000$ $\text{BETA } (2) = .178$ $\text{MACH } = 1.2462$ $C = 600.16$ $P = 552.05$ $RN/L = 3.0273$

SECTION : UPRIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/8V .2172 .4120 .5070 .6020 .6970 .7920

α_{-C-7}
 .122 -.6595 -.6612 -.6651 -.6685 -.6616 -.6458
 .157 -.6522 -.6607 -.6685 -.6694 .0000 -.6455
 .185 -.6554 -.6545 -.5597 -.5723 -.6602 -.6465
 .187 -.5667 -.5771 -.5779 -.6705 -.6538 -.6430
 .188 -.4942 -.6539 -.6725 -.6526 -.6437 -.6232

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OF PGDP ORIGINAL

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

(XEBK48)

$\alpha_{-14.4} + \beta_1 = 8.003$ $\text{BETA}_{(1)} = 4.235$ $\text{MACH}_{(1)} = 1.2062$ $Q = 600.16$ $P = 552.05$ $RN/L = 3.0273$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 8.003$ $\text{BETA}_{(1)} = 4.235$ $\text{MACH}_{(1)} = 1.2062$ $Q = 600.16$ $P = 552.05$ $RN/L = 3.0273$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.933$ $\text{BETA}_{(1)} = -3.854$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.934$ $\text{BETA}_{(1)} = -.116$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.935$ $\text{BETA}_{(1)} = 4.253$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.936$ $\text{BETA}_{(1)} = 4.254$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.937$ $\text{BETA}_{(1)} = 4.255$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.938$ $\text{BETA}_{(1)} = 4.256$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.939$ $\text{BETA}_{(1)} = 4.257$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.940$ $\text{BETA}_{(1)} = 4.258$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.941$ $\text{BETA}_{(1)} = 4.259$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

$\alpha_{-14.4} + \beta_1 = 11.942$ $\text{BETA}_{(1)} = 4.260$ $\text{MACH}_{(1)} = 1.2450$ $Q = 599.95$ $P = 552.98$ $RN/L = 3.0281$

SECTION: 1) RIGHT H.A.C INSIDE

DEPENDENT VARIABLE CP

 $\alpha_{-14.4} + \beta_1 = 3170 .4120 .5070 .6020 .6970 .7920$

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TABULATED PRESSURE DATA - OA14B (AMES 1-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

	X-CR	Y-CR	Z-CR	XMP	YMP	ZMP	RUDDER	SPDBRK	25,000
	X-CR	Y-CR	Z-CR	XMP	YMP	ZMP	BCFLAP	L-ELVN	4,000
	X-CR	Y-CR	Z-CR	XMP	YMP	ZMP	R-ELVN	MACH	1,100
ALPHA = 1.0 = -4.022 BETA = 1.1 = -3.848 MACH = 1.1001									
SECTION 1: RIGHT HAND SIDE							DEPENDENT VARIABLE CP		
1-BY	.3170	.4120	.5070	.6020	.6970	.7920			
A: C2	-1.7138	-1.7156	-1.7146	-1.7741	-1.7782	-1.7437	-1.7035		
B: C2	-1.7137	-1.7138	-1.7133	-1.7803	-1.7784	.0000	.7014		
C: C2	-1.7136	-1.7135	-1.7133	-1.7819	-1.7784	-1.7394	-1.7096		
D: C2	-1.7135	-1.7134	-1.7132	-1.7834	-1.7774	-1.7375	-1.7051		
E: C2	-1.7134	-1.7133	-1.7132	-1.7833	-1.7778	-1.7368	-1.6952		
ALPHA = 1.1 = -4.022 BETA = 1.2 = .189 MACH = 1.1001							DEPENDENT VARIABLE CP		
SECTION 1: RIGHT HAND SIDE									
2-BY	.3170	.4120	.5070	.6020	.6970	.7920			
A: C2	-1.5935	-1.7142	-1.7135	-1.7134	-1.7022	-1.6866			
B: C2	-1.5934	-1.7141	-1.7134	-1.7169	-1.7167	.0000	.6939		
C: C2	-1.5933	-1.7140	-1.7134	-1.7232	-1.7173	-1.7269	-1.6953		
D: C2	-1.5932	-1.7139	-1.7131	-1.7231	-1.7128	-1.6998	-1.7018		
E: C2	-1.5931	-1.7138	-1.7132	-1.7225	-1.7095	-1.6905	-1.6959		
ALPHA = 1.2 = -4.023 BETA = 1.3 = .4271 MACH = 1.1001							DEPENDENT VARIABLE CP		
SECTION 1: RIGHT HAND SIDE									
2-BY	.3170	.4120	.5070	.6020	.6970	.7920			
A: C2	-1.7017	-1.7123	-1.7226	-1.7337	-1.7183	-1.6782			
B: C2	-1.7016	-1.7053	-1.7069	-1.7325	-1.7355	-1.3600	.6756		
C: C2	-1.7015	-1.7048	-1.7119	-1.7328	-1.7398	-1.7235	-1.6766		
D: C2	-1.7014	-1.7022	-1.7312	-1.7422	-1.7422	-1.7086	-1.6792		
E: C2	-1.7013	-1.7033	-1.7356	-1.7516	-1.7382	-1.7045	-1.6671		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R CRB SPEED BRAKE
SECTION : 1 POSITION 4-20 INSIDE
DEPENDENT VARIABLE CP

BET₁ = .3173 .4120 .5070 .6020 .6970 .7920
BET₂ = .3173 .4120 .5070 .6020 .6970 .7920
BET₃ = .3173 .4120 .5070 .6020 .6970 .7920

SECTION : 1 POSITION 4-20 INSIDE
DEPENDENT VARIABLE CP

BET₁ = .3173 .4120 .5070 .6020 .6970 .7920
BET₂ = .3173 .4120 .5070 .6020 .6970 .7920
BET₃ = .3173 .4120 .5070 .6020 .6970 .7920

SECTION : 1 POSITION 4-20 INSIDE
DEPENDENT VARIABLE CP

BET₁ = .3173 .4120 .5070 .6020 .6970 .7920
BET₂ = .3173 .4120 .5070 .6020 .6970 .7920
BET₃ = .3173 .4120 .5070 .6020 .6970 .7920

SECTION : 1 POSITION 4-20 INSIDE
DEPENDENT VARIABLE CP

BET₁ = .3173 .4120 .5070 .6020 .6970 .7920
BET₂ = .3173 .4120 .5070 .6020 .6970 .7920
BET₃ = .3173 .4120 .5070 .6020 .6970 .7920

SECTION : 1 POSITION 4-20 INSIDE
DEPENDENT VARIABLE CP

BET₁ = .3173 .4120 .5070 .6020 .6970 .7920
BET₂ = .3173 .4120 .5070 .6020 .6970 .7920
BET₃ = .3173 .4120 .5070 .6020 .6970 .7920

SECTION : 1 POSITION 4-20 INSIDE
DEPENDENT VARIABLE CP

BET₁ = .3173 .4120 .5070 .6020 .6970 .7920
BET₂ = .3173 .4120 .5070 .6020 .6970 .7920
BET₃ = .3173 .4120 .5070 .6020 .6970 .7920

BET₁ = .3173 .4120 .5070 .6020 .6970 .7920
BET₂ = .3173 .4120 .5070 .6020 .6970 .7920
BET₃ = .3173 .4120 .5070 .6020 .6970 .7920

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REGULATED PRESSURE DATA - CANT (AMES 11-073-1)

AMES 11-073(CAN) - 140A/B/C/R ORB SPED BRAKE
P = 736.61 RNL = 3.1931
INTERVAL

SECTION 1 INRIGHT H/LOC INSIDE DEPENDENT VARIABLE CP

Z/E = .3170 .4120 .5070 .6020 .6970 .7920
X/C = .6774 -.6814 -.6859 -.7183 -.7134 -.6609
.677 -.6757 -.6812 -.7072 -.7283 -.6000 -.6580
.678 -.6774 -.6812 -.7163 -.7297 -.7112 -.6673
.677 -.6785 -.6812 -.7163 -.7292 -.7133 -.7025 -.5571
.678 -.6793 -.6812 -.7163 -.7292 -.7129 -.6925 -.6300

A_EPA = 11.3850 BETA = 1.0 = -3.8-5 MACH = 1.092 P = 599.65 RNL = 3.1931
SECTION 1 INRIGHT H/LOC INSIDE DEPENDENT VARIABLE CP

Z/E = .3170 .4120 .5070 .6020 .6970 .7920
X/C = .6774 -.6814 -.6859 -.7183 -.7134 -.6609
.677 -.6757 -.6812 -.7072 -.7283 -.6000 -.6580
.678 -.6774 -.6812 -.7163 -.7297 -.7112 -.6673
.677 -.6785 -.6812 -.7163 -.7292 -.7133 -.7025 -.5571
.678 -.6793 -.6812 -.7163 -.7292 -.7129 -.6925 -.6300

A_EPA = 11.3850 BETA = 1.0 = -3.8-5 MACH = 1.092 P = 599.65 RNL = 3.1931
SECTION 1 INRIGHT H/LOC INSIDE DEPENDENT VARIABLE CP

Z/E = .3170 .4120 .5070 .6020 .6970 .7920
X/C = .6774 -.6814 -.6859 -.7183 -.7134 -.6609
.677 -.6757 -.6812 -.7072 -.7283 -.6000 -.6580
.678 -.6774 -.6812 -.7163 -.7297 -.7112 -.6673
.677 -.6785 -.6812 -.7163 -.7292 -.7133 -.7025 -.5571
.678 -.6793 -.6812 -.7163 -.7292 -.7129 -.6925 -.6300

A_EPA = 11.3850 BETA = 1.0 = -3.8-5 MACH = 1.092 P = 599.65 RNL = 3.1931
SECTION 1 INRIGHT H/LOC INSIDE DEPENDENT VARIABLE CP

Z/E = .3170 .4120 .5070 .6020 .6970 .7920
X/C = .6774 -.6814 -.6859 -.7183 -.7134 -.6609
.677 -.6757 -.6812 -.7072 -.7283 -.6000 -.6580
.678 -.6774 -.6812 -.7163 -.7297 -.7112 -.6673
.677 -.6785 -.6812 -.7163 -.7292 -.7133 -.7025 -.5571
.678 -.6793 -.6812 -.7163 -.7292 -.7129 -.6925 -.6300

A_EPA = 11.3850 BETA = 1.0 = -3.8-5 MACH = 1.092 P = 599.65 RNL = 3.1931
SECTION 1 INRIGHT H/LOC INSIDE DEPENDENT VARIABLE CP

Z/E = .3170 .4120 .5070 .6020 .6970 .7920
X/C = .6774 -.6814 -.6859 -.7183 -.7134 -.6609
.677 -.6757 -.6812 -.7072 -.7283 -.6000 -.6580
.678 -.6774 -.6812 -.7163 -.7297 -.7112 -.6673
.677 -.6785 -.6812 -.7163 -.7292 -.7133 -.7025 -.5571
.678 -.6793 -.6812 -.7163 -.7292 -.7129 -.6925 -.6300

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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REFERENCE DATA

REFERENCE DATA							PARAMETRIC DATA		
SREF = 2590.0000	SQ.FT.	XMRP = 1076.6800	IN. X0	RUDDER = -10.000	SPDBRK = 85.000				
LREF = 474.8000	IN.	YMRP = .0000	IN. Y0	BDFLAP = 16.300	L-ELVN = 4.000				
SREF = 535.0580	IN.	ZMPP = 375.0000	IN. Z0	R-ELVN = MACH = .900					
SCALE = .0300									
ALPHA (1) = -4.039		BETA (1) = -3.850	MACH = .89970	0 = 599.92	P = 1058.7	RNL = 3.5763			
SECTION : 1:RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/B:	.3170	.4120	.5070	.6020	.6970	.7920			
X/CV	.758	-.4385	-.4123	-.4336	-.4501	-.4279	.3723		
	.757	-.4390	-.4122	-.4470	-.4458	.0000	.3884		
	.755	-.3991	-.4293	-.4565	-.4553	-.4158	-.3853		
	.687	-.4057	-.4495	-.4522	-.4520	-.4182	-.3768		
	.659	-.4241	-.4634	-.4695	-.4574	-.4208	-.3721		
ALPHA (2) = -4.026		BETA (2) =	.188	MACH = .89970	0 = 599.92	P = 1058.7	RNL = 3.5763		
SECTION : 1:RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CV	.758	-.3993	-.4202	-.4175	-.4411	-.4326	-.3934		
	.757	-.4049	-.4174	-.4371	-.4475	.0000	-.3913		
	.655	-.3650	-.4212	-.4458	-.4602	-.4210	-.3858		
	.587	-.4068	-.4418	-.4553	-.4617	-.4259	-.3828		
	.358	-.4219	-.4587	-.4600	-.4553	-.4298	-.3722		
ALPHA (3) = -4.037		BETA (3) =	.4267	MACH = .89970	0 = 599.92	P = 1058.7	RNL = 3.5763		
SECTION : 1:RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/B:	.3170	.4120	.5070	.6020	.6970	.7920			
X/CV	.758	-.4126	-.4193	-.4421	-.4523	-.4433	-.3977		
	.757	-.4112	-.4235	-.4544	-.4608	.0000	-.4074		
	.655	-.4112	-.4341	-.4634	-.4651	-.4377	-.4043		
	.587	-.4223	-.4474	-.4620	-.4608	-.4296	-.4049		
	.358	-.4272	-.4637	-.4717	-.4554	-.4313	-.3895		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE
 SECTION 1) RIGHT 1/2 INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP
 .759 -.4101 -.4277 -.4496 -.4671 -.4452 -.4073
 .757 -.4172 -.4304 -.4553 -.4678 -.4000 -.4078
 .805 -.4103 -.4427 -.4657 -.4723 -.4454 -.3957
 .897 -.4143 -.4582 -.4801 -.4610 -.4409 -.3879
 .953 -.4448 -.4678 -.4726 -.4560 -.4366 -.3875

ALPHA (2) = .032 BETA (1) = -3.867 MACH = .89853 0 = 599.04 P = 1060.0 RNL = 3.5758
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP
 .759 -.4109 -.4249 -.4454 -.4582 -.4513 -.4027
 .757 -.4203 -.4253 -.4518 -.4627 -.4627 -.4034
 .805 -.4323 -.4221 -.4583 -.4655 -.4398 -.3921
 .862 -.4332 -.4562 -.4608 -.4707 -.4504 -.4051
 .953 -.4314 -.4528 -.4747 -.4669 -.4530 -.3919

ALPHA (2) = .028 BETA (3) = 4.248 MACH = .89853 0 = 599.04 P = 1060.0 RNL = 3.5758
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP
 .759 -.4248 -.4431 -.4668 -.4892 -.4729 -.4209
 .757 -.4225 -.4412 -.4703 -.4859 -.0000 -.4200
 .805 -.4301 -.4530 -.4923 -.4925 -.4661 -.4235
 .897 -.4410 -.4639 -.4969 -.4956 -.4661 -.4240
 .953 -.4435 -.4815 -.5093 -.4873 -.4597 -.4100

ALPHA (3) = 3.393 BETA (1) = -3.868 MACH = .90073 0 = 600.62 P = 1057.6 RNL = 3.5790
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP
 .759 -.4242 -.4526 -.4526 -.4848 -.4828 -.4729 -.4194
 .757 -.4233 -.4527 -.4630 -.4830 -.4894 -.0000 -.4229
 .805 -.4308 -.4515 -.4634 -.4941 -.4700 -.4145
 .862 -.4356 -.4795 -.4986 -.4996 -.4608 -.4144
 .953 -.4463 -.4959 -.5057 -.4927 -.4589 -.3956

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

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ALPHA (3) = 4.003 BETA (2) = .164 MACH = .90073 O = 600.62 P = 1057.6 RN/L = 3.5790

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.4241 -.4376 -.4637 -.4798 -.4751 -.4236

-.757 -.4211 -.4435 -.4696 -.4812 -.0000 -.4269

-.805 -.4199 -.4550 -.4976 -.4876 -.4663 -.4299

-.867 -.4407 -.4683 -.4919 -.4885 -.4659 -.4175

-.968 -.4388 -.4863 -.4989 -.4928 -.4694 -.4075

ALPHA (3) = 4.005 BETA (3) = .4239 MACH = .90073 O = 600.62 P = 1057.6 RN/L = 3.5790

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.4433 -.4704 -.5016 -.5251 -.5127 -.4496

-.757 -.4583 -.4709 -.5101 -.5286 -.0000 -.4432

-.805 -.4538 -.4772 -.5165 -.5390 -.5002 -.4448

-.867 -.4586 -.5049 -.5284 -.5383 -.4982 -.4470

-.968 -.4559 -.5157 -.5489 -.5267 -.4997 -.4295

ALPHA (4) = 8.040 BETA (1) = -.3.870 MACH = .89937 O = 599.61 P = 1059.0 RN/L = 3.5771

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.4690 -.4844 -.5158 -.5444 -.5134 -.4581

-.757 -.4692 -.4943 -.5272 -.5430 -.0000 -.4616

-.805 -.4763 -.5021 -.5449 -.5534 -.5215 -.4507

-.867 -.4770 -.5342 -.5537 -.5538 -.5082 -.4410

-.968 -.4976 -.5622 -.5676 -.5613 -.5239 -.4311

ALPHA (4) = 8.045 BETA (2) = .178 MACH = .89937 O = 599.61 P = 1059.0 RN/L = 3.5771

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.4528 -.4715 -.4981 -.5217 -.5080 -.4471

-.757 -.4538 -.4716 -.5144 -.5394 -.0000 -.4523

-.805 -.4538 -.4719 -.5274 -.5493 -.5089 -.4594

-.867 -.4535 -.4715 -.5370 -.5399 -.5047 -.4392

-.968 -.4525 -.4718 -.5281 -.5333 -.5054 -.4277

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

$\rho_{\infty} = \rho_0 (+) = 9.043$ $\text{EETA} (- 3) = 4.236$ $\text{MACH} = .89937$ $Q = 599.61$ $P = 1059.0$ $RN/L = 3.5771$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SQEF	=	2530.0000 SQ.FT.	XMRP	=	1076.6800 IN. X0
LREF	=	474.6000 IN.	YMRP	=	.0000 IN. Y0
BREF	=	935.0580 IN.	ZMRP	=	375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) = -3.976 BETA (1) = -7.854 MACH = .59542 Q = 592.57 P = 2387.9 RNL = 4.8104

SECTION 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .758 -.5154 -.5292 -.5814 -.5824 -.5282 -.4376

.757 -.5163 -.5112 -.5876 -.5860 .0000 -.4288

.805 -.5258 -.5686 -.6146 -.5946 -.5191 .4381

.887 -.5282 -.6187 -.6280 -.5793 -.5052 -.4291

.958 -.5730 -.6369 -.6316 -.5604 -.4997 -.4235

ALPHA (1) = -3.959 BETA (2) = -3.844 MACH = .59542 Q = 592.57 P = 2387.9 RNL = 4.8104

SECTION 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .703 -.4685 -.4653 -.5361 -.5401 -.5065 -.4298

.757 -.4697 -.5112 -.5363 -.5337 .0009 -.4324

.805 -.4718 -.5219 -.5571 -.5497 -.4635 -.4226

.887 -.5050 -.5338 -.5702 -.5404 -.5007 -.4175

.958 -.5140 -.5662 -.5728 -.5466 -.4840 -.3985

ALPHA (1) = -3.955 BETA (3) = .188 MACH = .59542 Q = 592.57 P = 2387.9 RNL = 4.8104

SECTION 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .703 -.4790 -.5031 -.5446 -.5467 -.5196 -.4303

.757 -.4790 -.5167 -.5529 -.5600 .0000 -.4365

.805 -.4897 -.5268 -.5810 -.5788 -.5032 -.4306

.887 -.4892 -.5193 -.5326 -.5591 -.4920 -.4305

.958 -.5262 -.5712 -.6010 -.5531 -.4946 -.3986

PARAMETRIC DATA					
RUDDER	=	-10.000	SPDBRK	=	65.000
BOFLAP	=	15.000	L-ELVN	=	4.000
R-ELVN	=	300	MACH	=	.600

(XEBK51) (13 AUG 75)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-0731(OA14B) - 140A/B/C/R ORB SPEED BRAKE

$$\text{ALPHA} (\text{1}) = -5.953 \quad \text{BETA} (\text{4}) = 4.269 \quad \text{MACH} = .59542 \quad \text{Q} = 592.57 \quad \text{P} = 2387.9 \quad \text{RNL} = 4.8104$$

SECTION 1 (RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.4924	-.5351	-.5767	-.5743	-.5199	-.4436
.757	-.5354	-.5383	-.5847	-.5795	.0000	-.4421
.805	-.5127	-.5544	-.5824	-.5931	-.5203	-.4329
.853	-.5268	-.5910	-.6130	-.5724	-.5032	-.4259
.891	-.5421	-.6120	-.6159	-.5541	-.4906	-.4009

$$\text{ALPHA} (\text{1}) = -3.980 \quad \text{BETA} (\text{5}) = 8.339 \quad \text{MACH} = .59542 \quad \text{Q} = 592.57 \quad \text{P} = 2387.9 \quad \text{RNL} = 4.8104$$

SECTION 1 (RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5446	-.5808	-.6312	-.6081	-.5352	-.4422
.757	-.5521	-.5955	-.6522	-.6074	.0000	-.4445
.805	-.5510	-.6138	-.6625	-.6259	-.5293	-.4512
.853	-.5712	-.6575	-.6534	-.5956	-.5079	-.4291
.891	-.6135	-.6617	-.6532	-.5863	-.4913	-.3870

$$\text{ALPHA} (\text{2}) = .06C \quad \text{BETA} (\text{1}) = -7.891 \quad \text{MACH} = .59620 \quad \text{Q} = 593.99 \quad \text{P} = 2387.5 \quad \text{RNL} = 4.8200$$

SECTION 1 (RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5679	-.5795	-.6427	-.6420	-.5902	-.4652
.757	-.5664	-.5968	-.6534	-.6439	.0000	-.4659
.805	-.5675	-.6124	-.6603	-.6493	-.5341	-.4652
.853	-.5972	-.6538	-.5541	-.6312	-.5474	-.4665
.891	-.6245	-.7059	-.7045	-.5301	-.5259	-.4430

$$\text{ALPHA} (\text{2}) = .57C \quad \text{BETA} (\text{2}) = -3.863 \quad \text{MACH} = .59620 \quad \text{Q} = 593.99 \quad \text{P} = 2387.5 \quad \text{RNL} = 4.8200$$

SECTION 1 (RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.4681	-.5172	-.5538	-.5628	-.5370	-.4457
.757	-.5119	-.5271	-.5124	-.5740	.0000	-.4528
.805	-.5157	-.5336	-.5818	-.5807	-.5210	-.4440
.853	-.5152	-.5286	-.5645	-.5748	-.5151	-.4354
.891	-.5153	-.5163	-.5926	-.5712	-.5056	-.4154

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TABLED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

$\Delta_{B-A} (2) = .075$ $\text{BETA } (3) = .165$ $\text{MACH } = .59620$ $Q = 593.99$ $P = 2387.5$ $RN/L = 4.8200$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.706 -.4921 -.5218 -.5718 -.5744 -.5369 -.4491

.757 -.5005 -.5345 -.5999 -.5835 .0000 -.4496

.805 -.5102 -.5581 -.6103 -.5951 -.5288 -.4491

.897 -.5239 -.5894 -.6156 -.5771 -.5209 -.4402

.559 -.5404 -.6184 -.6229 -.5744 -.5091 -.4121

$\Delta_{C-A} (2) = .077$ $\text{BETA } (4) = 4.249$ $\text{MACH } = .59620$ $Q = 593.99$ $P = 2387.5$ $RN/L = 4.8200$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.708 -.5326 -.5605 -.6094 -.6108 -.5517 -.4535

.757 -.5432 -.5956 -.6412 -.6184 .0000 -.4613

.805 -.5493 -.5974 -.6519 -.6334 -.5512 -.4490

.897 -.5566 -.6408 -.6614 -.6110 -.5320 -.4312

.553 -.5315 -.6641 -.6564 -.6039 -.5161 -.4023

$\Delta_{C-A} (2) = .066$ $\text{BETA } (5) = 8.300$ $\text{MACH } = .59620$ $Q = 593.99$ $P = 2387.5$ $RN/L = 4.8200$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5819 -.6279 -.7021 -.6515 -.5778 -.4318

.757 -.6001 -.6392 -.7047 -.6588 .0000 -.4266

.805 -.5998 -.6616 -.7209 -.6719 -.5471 -.4178

.897 -.6253 -.7215 -.7266 -.6426 -.5274 -.4098

.553 -.6353 -.7337 -.7130 -.6251 -.5050 -.3733

$\Delta_{C-A} (3) = 4.023$ $\text{BETA } (1) = -7.901$ $\text{MACH } = .59564$ $Q = 593.05$ $P = 2388.1$ $RN/L = 4.8166$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3173 .4120 .5070 .6020 .6970 .7920

X/CV -.753 -.6397 -.6619 -.7254 -.7378 -.6666 -.5205

.757 -.5495 -.5832 -.7530 -.7502 .0000 -.5112

.805 -.5742 -.7144 -.7224 -.7622 -.6373 -.5110

.897 -.6743 -.7656 -.7935 -.7245 -.6060 -.4758

.553 -.7031 -.6191 -.7331 -.7117 -.5232 -.4414

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REGULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (3) = 4.327 BETA (2) = -3.864 MACH = .59564 Q = 593.05 P = 2388.1 RN/L = 4.8166
 SECTION : 1. RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z, BY .3170 .4120 .5070 .6020 .6970 .7920
 X,C,V

.757 -1.5137 -.5370 -.6017 -.6108 -.5537 -.4536
 .757 -.5120 -.5606 -.6074 .0000 -.4712
 .825 -.5281 -.5552 -.6379 -.6189 -.5344 -.4650
 .897 -.5507 -.5223 -.6457 -.5017 -.5382 -.4443
 .968 -.5730 -.5375 -.6434 -.5970 -.5332 -.4172

ALPHA (3) = 4.329 BETA (3) = .191 MACH = .59564 Q = 593.05 P = 2388.1 RN/L = 4.8166
 SECTION : 1. RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z, BY .3170 .4120 .5070 .6020 .6970 .7920
 X,C,V

.757 -.5377 -.5150 -.6056 -.6294 -.5730 -.4839
 .757 -.5287 -.5257 -.6231 -.6239 .0000 -.4896
 .825 -.5436 -.5318 -.6103 -.6106 -.5635 -.4813
 .897 -.5521 -.5425 -.5536 -.5254 -.5505 -.4587
 .968 -.5621 -.5561 -.5555 -.5078 -.5357 -.4434

ALPHA (3) = 4.331 BETA (4) = 4.239 MACH = .59564 Q = 593.05 P = 2388.1 RN/L = 4.8166
 SECTION : 1. RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z, BY .3170 .4120 .5070 .6020 .6970 .7920
 X,C,V

.757 -.5348 -.5148 -.6041 -.6501 -.5764 -.4556
 .757 -.5223 -.5141 -.5677 -.5632 .0000 -.4546
 .825 -.5153 -.4941 -.6400 -.6800 -.5544 -.4380
 .897 -.5119 -.4919 -.6792 -.7055 -.5495 -.4107
 .968 -.5073 -.4904 -.7041 -.7024 -.6224 -.3917

ALPHA (3) = 4.335 BETA (5) = 8.279 MACH = .59564 Q = 593.05 P = 2388.1 RN/L = 4.8166
 SECTION : 1. RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z, BY .3170 .4120 .5070 .6020 .6970 .7920
 X,C,V

.757 -.5271 -.5056 -.7392 -.7154 -.5954 -.4165
 .757 -.5053 -.5051 -.7825 -.7273 .0000 -.4146
 .825 -.5024 -.5016 -.7374 -.7275 -.5642 -.3255
 .897 -.5031 -.5021 -.6011 -.6393 -.5409 -.3599
 .968 -.5051 -.5059 -.7754 -.6636 -.4981 -.3229

(XEBK51)

(XEBK51)

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TABULATED PRESSURE DATA - ORION (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C/R ORB SPEED BRAKE SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CY		(XEBK51)
A _L PH4 (4) = 8.073	BETA _A (1 2) = -3.859	MACH = .59572	O = 593.16	P = 2387.8	RNL = 4.8358				
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP							X/CY		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	A _L PH4 (4) = 8.069	BETA _A (3) = .180	MACH = .59572
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP							X/CY		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	A _L PH4 (4) = 9.053	BETA _A (4) = 4.237	MACH = .59572
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP							X/CY		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	A _L PH4 (4) = 9.053	BETA _A (4) = 4.237	MACH = .59572
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP							X/CY		
A _L PH4 (4) = 9.053	BETA _A (4) = 4.237	MACH = .59572	O = 593.16	P = 2387.8	RNL = 4.8358				

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R CRB SPEED BRAKE

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.753	-.6032	-.6925	-.7411	-.6829	-.5628	-.3803
.757	-.6283	-.7066	-.7602	-.7162	.0000	-.3520
.805	-.6529	-.7389	-.7830	-.7100	-.5236	-.3660
.897	-.6954	-.8126	-.7867	-.6574	-.4746	-.3355
.956	-.7482	-.8141	-.7566	-.6211	-.4980	-.3126

ALPHA = 51 = 12.002 BETA (1) = -7.847 MACH = .59550 Q = 592.81 P = 2388.1 RNL = 4.9267

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.728	-.6632	-.7016	-.7210	-.7722	-.6743	-.5051
.757	-.6539	-.7095	-.7877	-.7689	.0000	-.4892
.865	-.6554	-.7555	-.8171	-.8042	-.6324	-.4744
.867	-.5913	-.7952	-.8285	-.7531	-.5921	-.4329
.968	-.7115	-.8516	-.9221	-.7269	-.5977	-.4221

ALPHA = 51 = 12.023 BETA (2) = -3.840 MACH = .59550 Q = 592.81 P = 2388.1 RNL = 4.9267

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.719	-.5538	-.5212	-.5405	-.5405	-.5919	-.4787
.75	-.5559	-.5882	-.6507	-.5469	.0000	-.4573
.81	-.5526	-.6107	-.6819	-.6710	-.5605	-.4539
.89	-.5855	-.6508	-.6328	-.6467	-.5635	-.4313
.95	-.6195	-.6305	-.5857	-.6243	-.5491	-.4122

ALPHA = 51 = 12.027 BETA (3) = .177 MACH = .59550 Q = 592.81 P = 2388.1 RNL = 4.9267

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.5786	-.5172	-.5550	-.5728	-.5728	-.6075	-.5139
.57	-.5725	-.5231	-.6357	-.5831	.0000	-.5013
.61	-.5734	-.5153	-.5155	-.5355	-.6046	-.4350
.68	-.5933	-.5261	-.5522	-.5685	-.5835	-.4773
.73	-.6136	-.5213	-.5178	-.5653	-.5764	-.4653

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-:)

AMES 11-073(OAI48) -140A/B/C/R ORB SPEED BRAKE

ALPHA (5) = 12.02⁺ BETA (4) = 4.250 MACH = .59550 Q = 592.81 P = 2388.1 RNL = 4.8267

SECTION : (RIGHT HAND) INSIDE DEPENDENT VARIABLE CP

Z/EY: 3:7C .4:20 .5070 .6020 .6970 .7920

X/CY
.708 -.6255 -.6532 -.7373 -.7321 -.6387 -.4955
.757 -.6394 -.6446 -.7578 -.7335 -.0000 -.4682
.635 -.6401 -.7263 -.7755 -.7678 -.6151 -.4651
.897 -.6895 -.7676 -.7833 -.7140 -.5932 -.4509
.358 -.7245 -.8110 -.7832 -.6817 -.5690 -.4037

ALPHA (5) = 12.010 BETA (5) = 8.307 MACH = .59550 Q = 592.81 P = 2388.1 RNL = 4.8267

SECTION : (RIGHT HAND) INSIDE DEPENDENT VARIABLE CP

Z/EY: 3:7C .4:20 .5070 .6020 .6970 .7920

X/CY
.708 -.6442 -.6342 -.7732 -.7271 -.6106 -.4092
.757 -.6532 -.7163 -.7920 -.7266 -.0000 -.3819
.805 -.6732 -.7632 -.8142 -.7477 -.5492 -.3847
.857 -.7157 -.8259 -.8218 -.6889 -.5323 -.3532
.958 -.7459 -.8412 -.7749 -.6358 -.4813 -.3144

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE

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1XEBK52)

(13 AUG 75)

REFERENCE DATA

Z/REF = 2622.0000 SG, FT. XREF = 1076.6900 IN. X0
 Z/REF = 174.6500 [H] YREF = .0000 IN. Y0
 Z/REF = 936.0500 [W] ZREF = 375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -4.052 BETA (1) = -3.860 MACH = 1.3963 0 = 600.46 P = 439.94 RNL = 2.9139

SECTION : LEFT HAND SIDE

DEPENDENT VARIABLE CP

Z/REF .3170 .4120 .5070 .6020 .6970 .7920

X/CP	Z/REF	BETTA (1)	BETTA (2)	MACH	P	RNL
-1.50	-1.5647	-1.6874	-1.6004	-1.5975	-1.5779	-1.5426
-1.55	-1.6225	-1.6834	-1.6655	-1.5932	.0000	-1.5426
-1.60	-1.6615	-1.6868	-1.6029	-1.5980	-1.5725	-1.5402
-1.65	-1.6863	-1.6819	-1.6093	-1.5940	-1.5687	-1.5374
-1.70	-1.6963	-1.6818	-1.6265	-1.5857	-1.5631	-1.5308

A-345 (1) = -34.3 BETA (2) = .166 MACH = 1.3963 0 = 600.46 P = 439.94 RNL = 2.9139

SECTION : RIGHT HAND SIDE

DEPENDENT VARIABLE CP

Z/REF .3170 + 20 .5070 .6020 .6970 .7920

X/CP	Z/REF	BETTA (1)	BETTA (2)	MACH	P	RNL
-1.50	-1.5311	-1.5238	-1.5343	-1.5828	-1.5785	-1.5541
-1.55	-1.5313	-1.5235	-1.5276	-1.6200	.0000	-1.5548
-1.60	-1.5317	-1.5236	-1.5392	-1.6898	-1.5768	-1.5546
-1.65	-1.5319	-1.5234	-1.5944	-1.6985	-1.5754	-1.5488
-1.70	-1.5320	-1.5232	-1.5938	-1.6817	-1.5678	-1.5431

A-345 (1) = -34.3 BETA (2) = +.268 MACH = 1.3963 0 = 600.46 P = 439.94 RNL = 2.9139

SECTION : LEFT HAND SIDE

DEPENDENT VARIABLE CP

Z/REF .3170 .4120 .5070 .6020 .6970 .7920

X/CP	Z/REF	BETTA (1)	BETTA (2)	MACH	P	RNL
-1.50	-1.5015	-1.5039	-1.5347	-1.5352	-1.5991	-1.5650
-1.55	-1.5017	-1.5041	-1.5295	-1.5957	.0000	-1.5679
-1.60	-1.5018	-1.5042	-1.5937	-1.5957	-1.5824	-1.5686
-1.65	-1.5019	-1.5043	-1.5245	-1.5952	-1.5879	-1.5689
-1.70	-1.5020	-1.5044	-1.5665	-1.5929	-1.5846	-1.5658

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REGULATED PRESSURE DATA - CA148 (AMES 11-073-1)

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AMES 11-073(CA148) -140A/B/C/R ORB SPEED BRAKE

(YEB52)

4. 1.2. 5. = 2.0.2. ETTA (2) = .174 MACH = 1.3954 Q = 600.16 P = 439.71 RNL = 2.3232

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (2) = .174 MACH = 1.3954 Q = 600.16 P = 439.71 RNL = 2.3232

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .236 MACH = 1.3954 Q = 600.16 P = 439.71 RNL = 2.3092

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .236 MACH = 1.3954 Q = 600.16 P = 439.71 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

4. 1.2. 5. = 2.0.2. ETTA (3) = .876 MACH = 1.3955 Q = 555.85 P = 435.24 RNL = 2.3107

SECTION 1 DIRECT AND INVERSE DEPENDENT VARIABLE CP

2. 2. .3170 .4120 .5070 .6020 .6970 .7920

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

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A-243 : 41 = 7.931 BETA (3) = 4.235 MACH = 1.3955 J = 599.65 P = 439.24 RNL = 2.9107

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY	.728	-.6074	-.6017	-.6139	-.6134	-.5955	-.5631
	.757	-.5958	-.6362	-.6193	-.6148	-.0000	-.5631
	.655	-.5956	-.6129	-.6205	-.6148	.5905	-.5619
	.897	-.6227	-.6225	-.6214	-.6105	.5851	-.5596
	.363	-.6362	-.6234	-.6191	-.6030	.5806	-.5535

ALPHA : 51 = 11.858 BETA (1) = -3.866 MACH = 1.3951 Q = 600.34 P = 440.65 RNL = 2.9166

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X,CY	.759	-.6202	-.6141	-.5167	-.6193	-.6146	-.5964
	.757	-.6103	-.6145	-.6203	-.6205	-.0000	-.5362
	.835	-.6138	-.6164	-.6205	-.6217	-.6149	-.5969
	.637	-.6115	-.6229	-.6207	-.6210	-.6151	-.5958
	.553	-.6115	-.6234	-.6203	-.6165	-.6047	-.5851

ALPHA : 51 = 11.867 BETA (2) = .167 MACH = 1.3951 Q = 600.34 P = 440.65 RNL = 2.9166

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X,CY .728 -.6126 -.6075 -.6116 -.6083 -.5965 -.5800

.757 -.6041 -.6035 -.6147 -.6098 -.6098 -.5800

.805 -.5053 -.6119 -.6168 -.6109 -.5965 -.5807

.997 -.6075 -.6129 -.6173 -.6098 -.5923 -.5763

.933 -.6338 -.6144 -.6147 -.6005 -.5873 -.5603

ALPHA : 51 = 11.955 BETA (3) = 4.248 MACH = 1.3951 Q = 600.34 P = 440.65 RNL = 2.9166

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X,CY	.728	-.6163	-.6095	-.6222	-.6229	-.6047	-.5692
	.757	-.6054	-.6152	-.6279	-.6238	-.0000	-.5697
	.825	-.5232	-.5218	-.5298	-.5235	-.5983	-.5585
	.867	-.5119	-.5270	-.6309	-.6203	-.5952	-.5538
	.556	-.5154	-.5332	-.6276	-.6132	-.5834	-.5572

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R SPEED BRAKE

(XEBK52)

ALPHA : 61 = 15.826 BETA (1) = -3.845 MACH = 1.3947 Q = 600.64 P = 441.12 RN/L = 2.9102

SECTION : 1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.6295	-.6219	-.6298	-.6331	-.6281	-.6061
.757	-.6193	-.5247	-.6352	-.6343	.0000	-.6083
.805	-.6193	-.6271	-.6354	-.6354	-.6274	-.6061
.897	-.6217	-.6348	-.6364	-.6352	-.6253	-.6069
.958	-.6240	-.6374	-.6359	-.6307	-.6201	-.6022

ALPHA : 61 = 15.8+1 BETA (2) = .165 MACH = 1.3947 Q = 600.64 P = 441.12 RN/L = 2.9102

SECTION : 1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.739	-.5213	-.6163	-.6229	-.6205	-.6066	-.5894
.757	-.5161	-.5203	-.5259	-.6205	.0000	-.5910
.835	-.6153	-.6222	-.6274	-.6203	-.6075	-.5889
.887	-.6161	-.6255	-.6278	-.6177	-.6035	-.5871
.938	-.6177	-.6291	-.6254	-.6113	-.5967	-.5738

ALPHA : 61 = 15.933 BETA (3) = .4274 MACH = 1.3947 Q = 600.64 P = 441.12 RN/L = 2.9102

SECTION : 1)RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.753	-.6318	-.6293	-.6366	-.6392	-.6194	-.5872
.757	-.6226	-.6304	-.6423	-.6399	.0000	-.5868
.835	-.6228	-.5345	-.6451	-.6292	-.6156	-.5846
.887	-.6236	-.6386	-.6456	-.6345	-.6116	-.5767
.938	-.6226	-.5415	-.6428	-.6309	-.6090	-.5684

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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(XEBK53) (13 AUG 75)

REFERENCE DATA

SPEC	=	2690.0000 SQ.FT.	XMRP	=	1076.6800 IN. X0
LREF	=	474.8600 IN.	YMRP	=	.0000 IN. Y0
SREF	=	936.0680 IN.	ZMRP	=	375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) = -4.036 BETA (1) = -3.860 MACH = 1.2435

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7300 -.7217 -.7395 -.7324 -.7094 -.6740

.757 -.7139 -.7279 -.7443 -.7346 .0000 -.6743

.805 -.7139 -.7378 -.7488 -.7334 -.7032 -.6724

.897 -.7203 -.7501 -.7516 -.7284 -.6956 -.6685

.959 -.7299 -.7537 -.7455 -.7194 -.6897 -.6552

ALPHA (1) = -4.029 BETA (2) = .182 MACH = 1.2435

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7287 -.7197 -.7278 -.7218 -.7106 -.6888

.757 -.7157 -.7242 -.7295 -.7232 .0000 -.6900

.805 -.7192 -.7278 -.7313 -.7225 -.7111 -.6905

.897 -.7240 -.7334 -.7313 -.7201 -.7083 -.6881

.958 -.7264 -.7346 -.7277 -.7154 -.6988 -.6776

ALPHA (1) = -4.033 BETA (3) = 4.271 MACH = 1.2435

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7446 -.7323 -.7413 -.7387 -.7323 -.7133

.757 -.7235 -.7325 -.7411 -.7394 .0000 -.7133

.805 -.7282 -.7368 -.7425 -.7411 -.7309 -.7152

.887 -.7325 -.7379 -.7441 -.7385 -.7306 -.7083

.958 -.7356 -.7401 -.7411 -.7361 -.7252 -.7035

PARAMETRIC DATA

(XEBK53) (13 AUG 75)

RUDDER = -10.000 SPDBRK = 55.000

BDFLAP = 16.300 L-ELVN = -4.000

R-ELVN = 4.000 MACH = 1.250

RN/L = 3.0068

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XEBK53)

ALPHA (2) = -.011 BETA (1) = -3.881 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0119

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.7278	-.7222	-.7376	-.7102	-6771
.757	-.7156	-.7255	-.7365	.0000	-6774
.805	-.7155	-.7314	-.7420	-.7083	-6736
.887	-.7224	-.7522	-.7515	-.7354	-.6766
.953	-.7271	-.7558	-.7508	-.7243	-.6946

ALPHA (2) = .000 BETA (2) = .178 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0119

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.7390	-.7314	-.7420	-.7199	-6979
.757	-.7267	-.7359	-.7439	.0000	-6986
.805	-.7259	-.7409	-.7448	-.7181	-6989
.887	-.7326	-.7415	-.7453	-.7325	-.6893
.953	-.7354	-.7427	-.7422	-.7233	-.6746

ALPHA (2) = .000 BETA (3) = .4247 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0119

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.7556	-.7442	-.7433	-.7459	-7234
.757	-.7416	-.7458	-.7507	-.7466	.0000
.805	-.7404	-.7468	-.7526	-.7476	-7253
.887	-.7423	-.7412	-.7530	-.7478	-.7386
.953	-.7444	-.7426	-.7529	-.7424	-.7315

ALPHA (3) = 3.944 BETA (1) = -3.877 MACH = 1.2467 0 = 599.34 P = 551.34 RNL = 3.0121

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.7272	-.7135	-.7246	-.7265	-7125
.757	-.7119	-.7163	-.7276	-.7283	.0000
.805	-.7139	-.7151	-.7329	-.7312	-7153
.887	-.7132	-.7142	-.7345	-.7265	-.7136
.953	-.7142	-.7233	-.7354	-.7172	-.6943

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE (XEC8K53)						
SECTION (1)	RIGHT HAND INSIDE		DEPENDENT VARIABLE CP		P	RNL = 3.0121
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.738	-.7140	-.7055	-.7229	-.7180	-.6995	-.6653
.757	-.7029	-.7114	-.7281	-.7187	.0000	-.6672
.805	-.7019	-.7205	-.7317	-.7189	-.6985	-.6679
.897	-.7088	-.7331	-.7341	-.7163	-.6917	-.6643
.958	-.7151	-.7369	-.7305	-.7071	-.68812	-.6468
ALPHA (3) = 3.945	BETA (2) = 4.232	MACH = 1.2467	O = .0	= 599.84	P = 551.34	RNL = 3.0121
SECTION (1)	RIGHT HAND INSIDE		DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.738	-.7220	-.7115	-.7274	-.7229	-.6985	-.6677
.757	-.7053	-.7176	-.7341	-.7234	.0000	-.6677
.805	-.7048	-.7287	-.7388	-.7232	-.6938	-.6680
.897	-.7155	-.7423	-.7462	-.7177	-.6891	-.6646
.958	-.7247	-.7435	-.7352	-.7078	-.6946	-.6518
ALPHA (4) = 7.975	BETA (1) = -3.876	MACH = 1.2465	O = .0	= 599.91	P = 551.57	RNL = 3.0143
SECTION (1)	RIGHT HAND INSIDE		DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.738	-.7196	-.7056	-.7191	-.7193	-.7094	-.6839
.757	-.7066	-.7116	-.7212	-.7207	.0000	-.6839
.805	-.7064	-.7149	-.7229	-.7255	-.7108	-.6853
.897	-.7092	-.7166	-.7259	-.7250	-.7096	-.6809
.958	-.7139	-.7132	-.7259	-.7153	-.6952	-.6624
ALPHA (4) = 7.918	SETA (2) = .169	MACH = 1.2465	O = .0	= 599.91	P = 551.57	RNL = 3.0143
SECTION (1)	RIGHT HAND INSIDE		DEPENDENT VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.738	-.7063	-.7016	-.7173	-.7168	-.6949	-.6597
.757	-.6954	-.7053	-.7230	-.7190	.0000	-.6580
.805	-.6939	-.7143	-.7238	-.7160	-.6329	-.6593
.897	-.6934	-.7295	-.7331	-.7124	-.6849	-.6535
.958	-.7050	-.7320	-.7303	-.7057	-.6767	-.6377

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11 073(OA148) -140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.8E2 BETA (3) = 4.233 MACH = 1.2465 O = 599.91 P = 551.57 RN/L = 3.0143

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z.BV .3170 .4120 .5070 .6020 .6970 .7920

X.CY	.703	-.7167	-.7105	-.7281	-.7293	-.7005	-.6589
	-.757	-.7321	-.7148	-.7367	-.7312	.0000	-.6577
	-.805	-.7730	-.7289	-.7419	-.7295	-.6932	-.6568
	.887	-.7144	-.7419	-.7452	-.7234	-.6870	-.6509
	.568	-.7236	-.7443	-.7437	-.7135	-.6811	-.6424

ALPHA (5) = 11.915 BETA (1) = -3.857 MACH = 1.2482 O = 600.48 P = 550.64 RN/L = 3.0151

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X.CY	.703	-.7109	-.7020	-.7156	-.7156	-.7038	-.6758
	-.757	-.6984	-.7153	-.7182	-.7173	.0000	-.6768
	-.805	-.7025	-.7105	-.7162	-.7208	-.7057	-.6780
	.887	-.7031	-.7152	-.7215	-.7203	-.7057	-.6752
	.568	-.7031	-.7154	-.7210	-.7113	-.6996	-.6591

ALPHA (5) = 11.930 BETA (2) = -181 MACH = 1.2482 O = 600.48 P = 550.64 RN/L = 3.0151

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z.BV .3170 .4120 .5070 .6020 .6970 .7920

X.CY	.703	-.7012	-.6950	-.7144	-.7146	-.6922	-.6502
	-.757	-.6972	-.6990	-.7217	-.7177	.0000	-.6509
	-.805	-.6953	-.6957	-.7295	-.7177	-.6949	-.6486
	.887	-.6952	-.6958	-.7307	-.7144	-.6804	-.6481
	.568	-.7020	-.7131	-.7292	-.7342	-.6731	-.6349

ALPHA (5) = 11.935 BETA (3) = 4.245 MACH = 1.2482 O = 600.48 P = 550.64 RN/L = 3.0151

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

X.CY	.703	-.7013	-.6955	-.7147	-.7211	-.6992	-.6446
	-.757	-.6973	-.6993	-.7262	-.7219	.0000	-.6411
	-.805	-.6955	-.6957	-.7225	-.7217	-.6814	-.6376
	.887	-.6952	-.6958	-.7305	-.7147	-.6741	-.6353
	.568	-.7021	-.7131	-.7293	-.7357	-.6731	-.6347

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ORIGINAL PAGE 3

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE
ALPHA (2) = .009 BETA (1) = -3.870 MACH = 1.1014 Q = 600.89 P = 707.69 RN/L = 3.1864SECTION : UPRIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP	.708	-.7379	-.7332	-.8135	-.8240	-.7907	-.7336
Z,BV	.767	-.7840	-.7979	-.8268	-.8287	.0000	-.7327
	.605	-.7642	-.8128	-.8386	-.8283	-.7858	-.7317
	.827	-.7970	-.6355	-.8481	-.8233	-.7773	-.7309
	.958	-.9111	-.6475	-.8476	-.8115	-.7645	-.7129

ALPHA (2) = .092 BETA (2) = .176 MACH = 1.1014 Q = 600.89 P = 707.68 RN/L = 3.1864

SECTION : UPRIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP	.7556	-.7865	-.7891	-.8013	-.7749	-.7154	
Z,BV	.7651	-.7513	-.7726	-.8059	-.8039	.0000	-.7157
	.7616	-.7539	-.7653	-.8193	-.8072	-.7673	-.7128
	.767	-.7712	-.8159	-.8301	-.8325	-.7600	-.7109
	.768	-.7301	-.6531	-.6280	-.7342	-.7517	-.6596

ALFA (2) = .026 BETA (3) = .4243 MACH = 1.1014 Q = 600.89 P = 707.69 RN/L = 3.1864

SECTION : UPRIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP	.7857	-.7649	-.7962	-.7953	-.7694	-.7153	
Z,BV	.764	-.7505	-.7113	-.7939	-.8022	.0000	-.7129
	.7616	-.7513	-.7513	-.6131	-.8022	-.7642	-.7110
	.767	-.7581	-.6897	-.6232	-.7953	-.7609	-.7018
	.768	-.7676	-.6626	-.6334	-.7871	-.7479	-.6893

ALFA (2) = .3 .632 BETA (1) = -3.873 MACH = 1.1009 Q = 600.53 P = 707.91 RN/L = 3.1859

SECTION : UPRIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z,BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP	.7857	-.7642	-.7953	-.8021	-.7778	-.7170	
Z,BV	.764	-.7533	-.7542	-.8045	-.8092	.0000	-.7146
	.7616	-.7532	-.7576	-.8161	-.8109	-.7702	-.7127
	.767	-.7515	-.6533	-.8250	-.8071	-.7650	-.7047
	.768	-.7521	-.6173	-.8279	-.7927	-.7464	-.6691

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(XEBK5W)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6403

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7436 -.7448 -.7685 -.7893 -.7586 -.6937

.757 -.7323 -.7490 -.7840 -.7995 .000 -.6906

.925 -.7326 -.7646 -.7994 -.7930 -.7482 -.6932

.887 -.7481 -.7956 -.8095 -.7885 -.7413 -.6881

.958 -.7688 -.8145 -.8117 -.7777 -.7324 -.6733

ALPHA (3) = 3.9+3 BETA (2) = 4.232 MACH = 1.1009 0 = 600.53 P = 707.91 RNL = 3.1859

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7425 -.7455 -.7581 -.7796 -.7482 -.6877

.757 -.7323 -.7463 -.7830 -.7839 .000 -.6851

.905 -.7231 -.7556 -.7971 -.7846 -.7411 -.6827

.887 -.7470 -.7915 -.8075 -.7822 -.7338 -.6777

.953 -.7685 -.8059 -.8049 -.7657 -.7248 -.6628

ALPHA (4) = 7.306 BETA (1) = -3.871 MACH = 1.1009 0 = 600.53 P = 707.91 RNL = 3.1852

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7477 -.7497 -.7745 -.7819 -.7589 -.6980

.757 -.7357 -.7510 -.7847 -.7880 .000 -.6942

.925 -.7364 -.7543 -.7956 -.7915 -.7540 -.6895

.887 -.7501 -.7865 -.8035 -.7892 -.7559 -.6855

.959 -.7540 -.7959 -.8030 -.7835 -.7315 -.6685

ALPHA (4) = 8.035 BETA (2) = .173 MACH = 1.1009 0 = 600.53 P = 707.91 RNL = 3.1852

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7121 -.7138 -.7351 -.7528 -.7299 -.6609

.757 -.7029 -.7138 -.7550 -.7551 .0000 -.6566

.885 -.7012 -.7248 -.7551 -.7611 -.7178 -.6550

.937 -.7155 -.7520 -.7800 -.7566 -.7122 -.6486

.958 -.7364 -.7953 -.7209 -.7521 -.7029 -.6352

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DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6404

AMES 11-073(0A148) -14CA/B/C/R ORB SPEED BRAKE SECTION 1. RIGHT HAND INSIDE Z/BV .3170 .4120 .5070 .6020 .6970 .7920							(XEB254)
X/CV	ALPHA (4) = 8.008	BETA (3) = 4.224	MACH = 1.1009	Q = 600.53	P = 707.91	R/V/L = 3.1862	
X/CV	- .7577	- .7417	- .7634	- .7710	- .7407	- .6699	
Z/BV	- .7265	- .7441	- .7738	- .7745	.0000	.6637	
X/CV	- .7230	- .7620	- .7873	- .7781	- .7287	- .6606	
Z/BV	- .7400	- .7910	- .7946	- .7733	- .7166	- .6568	
X/CV	- .7674	- .8000	- .7927	- .7506	- .7095	- .6490	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
SECTION 1. RIGHT HAND INSIDE Z/BV .3170 .4120 .5070 .6020 .6970 .7920							
X/CV	ALPHA (5) = 11.922	BETA (1) = -3.854	MACH = 1.1005	Q = 600.31	P = 708.13	R/V/L = 3.1832	
X/CV	- .7520	- .7536	- .7746	- .7819	- .7636	- .7095	
Z/BV	- .7523	- .7541	- .7845	- .7863	.0000	.7067	
X/CV	- .7555	- .7655	- .7939	- .7892	- .7544	- .7053	
Z/BV	- .7555	- .7657	- .7937	- .7851	- .7528	- .6976	
X/CV	- .7571	- .7655	- .7979	- .7783	- .7385	- .6849	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
SECTION 1. RIGHT HAND INSIDE Z/BV .3170 .4120 .5070 .6020 .6970 .7920							
X/CV	ALPHA (5) = 11.9-1	BETA (2) = .179	MACH = 1.1035	Q = 600.31	P = 708.13	R/V/L = 3.1832	
X/CV	- .7505	- .7555	- .7811	- .7976	- .7622	- .6928	
Z/BV	- .7423	- .7655	- .7986	- .8017	.0000	.6909	
X/CV	- .7365	- .7743	- .8090	- .8043	- .7480	- .6859	
Z/BV	- .7565	- .8073	- .8235	- .7960	- .7426	- .6856	
X/CV	- .7744	- .8524	- .8241	- .7872	- .7308	- .6724	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	
SECTION 1. RIGHT HAND INSIDE Z/BV .3170 .4120 .5070 .6020 .6970 .7920							
X/CV	ALPHA (5) = 12.026	BETA (3) = 4.239	MACH = 1.1005	Q = 600.31	P = 708.13	R/V/L = 3.1832	
X/CV	- .7525	- .7659	- .7839	- .7823	- .7478	- .6785	
Z/BV	- .7370	- .7650	- .7920	- .7836	.0000	.6747	
X/CV	- .7365	- .7810	- .8052	- .7854	- .7378	- .6719	
Z/BV	- .7365	- .7810	- .8055	- .7823	- .7300	- .6643	
X/CV	- .7367	- .7817	- .8045	- .7731	- .7241	- .6542	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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(13 AUG 75)

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMAP =	1076.6800 IN. X0
LREF =	.474.9000 IN.	YMAP =	.0000 IN. Y0
BSEF =	.936.0693 IN.	ZMAP =	.375.0000 IN. Z0
SCLE =	.0300		

ALPHA (1) = -3.986 BETA (1) = -3.861 MACH = .90063 Q = 600.64 P = 1057.8 RNL = 3.5876
 SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.763	-.4454	-.4703	-.4939	-.5125	-.4658	-.4104
	.757	-.4459	-.4655	-.5168	-.5239	-.0000	-.3988
	.825	-.4584	-.4834	-.5319	-.5258	-.4801	-.4050
	.967	-.4731	-.5232	-.5537	-.5253	-.4742	-.3957
	.269	-.5003	-.5349	-.5615	-.5187	-.4681	-.3917

ALPHA (1) = -3.902 BETA (2) = .179 MACH = .90063 Q = 600.64 P = 1057.8 RNL = 3.5876
 SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.763	-.4633	-.4787	-.5048	-.5220	-.5069	-.4497
	.757	-.4531	-.4827	-.5107	-.5305	-.0000	-.4464
	.505	-.4572	-.4967	-.5372	-.5369	-.5053	-.4441
	.897	-.4225	-.5187	-.5592	-.5357	-.5305	-.4354
	.958	-.4914	-.5170	-.5624	-.5433	-.4901	-.4276

ALPHA (1) = -3.962 BETA (3) = .4.262 MACH = .90063 Q = 600.64 P = 1057.8 RNL = 3.5876
 SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV	.763	-.5317	-.5385	-.5709	-.5910	-.5792	-.4882
	.757	-.5249	-.5431	-.6019	-.6085	-.0000	-.4873
	.615	-.5272	-.5731	-.6131	-.6209	-.5766	-.4949
	.887	-.5515	-.6011	-.6327	-.6064	-.5633	-.4815
	.259	-.5796	-.6353	-.6620	-.6140	-.5548	-.4729

DATE 11-07-76

TABULATED PRESSURE DATA - OA1148 (AMES 11-073-1)

PAGE 6405

AMES 11-077(OA148) - 140A/B/C/R ORB SPEED BRAKE

(XEBK5)

$\alpha_{\text{beta}} + \beta_1 = .074$ $\text{BETA } (1) = -3.874$ $\text{MACH } = .89883$ $0 = 539.16$ $P = 1059.5$ $RNL = 3.5834$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .759 -.4762 -.4952 -.5182 -.5419 -.5184 -.4288
 .757 -.4715 -.4890 -.507 -.5116 .0000 -.4233
 .655 -.4721 -.503 -.5569 -.5599 -.5028 -.4203
 .687 -.4824 -.5577 -.5848 -.5549 -.5016 -.4139
 .663 -.5212 -.5725 -.6020 -.5649 -.4885 -.3992

$\alpha_{\text{beta}} + \beta_2 = .080$ $\text{BETA } (2) = .167$ $\text{MACH } = .89883$ $0 = 599.16$ $P = 1059.5$ $RNL = 3.5834$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .759 -.4822 -.4952 -.5219 -.5477 -.5391 -.4703
 .757 -.4813 -.5030 -.5389 -.5619 .0000 -.4632
 .655 -.4915 -.5685 -.5630 -.5654 -.5294 -.4679
 .687 -.4915 -.5631 -.5672 -.5732 -.5278 -.4551
 .663 -.5233 -.5812 -.5869 -.5645 -.5209 -.4551

$\alpha_{\text{beta}} + \beta_2 = .057$ $\text{BETA } (3) = 4.244$ $\text{MACH } = .89883$ $0 = 599.16$ $P = 1059.5$ $RNL = 3.5834$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .759 -.544 -.5591 -.6025 -.6255 -.5963 -.4881
 .757 -.5420 -.5755 -.6271 -.6064 .0000 -.4876
 .655 -.6570 -.6333 -.6539 -.6515 -.5774 -.4909
 .687 -.6551 -.6509 -.6732 -.6716 -.5739 -.4770
 .663 -.6539 -.6511 -.6731 -.6708 -.6335 -.5589 -.4616

$\alpha_{\text{beta}} + \beta_3 = 3.946$ $\text{BETA } (4) = -3.879$ $\text{MACH } = .89970$ $0 = 59.92$ $P = 1058.7$ $RNL = 3.5850$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CV
 .758 -.4277 -.4953 -.5-34 -.5677 -.5199 -.3953
 .757 -.4766 -.5144 -.5732 -.5739 .0000 -.4043
 .655 -.5374 -.5227 -.5354 -.5659 -.4939 -.3952
 .687 -.5122 -.5716 -.5259 -.5717 -.4890 -.3820
 .663 -.5123 -.5126 -.5254 -.5551 -.4731 -.3720

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE E407

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

(XEBK55)

$\alpha = 3.95$ $\beta = 3.95$ $\gamma = 3.95$ $\delta = 3.95$ $\epsilon = 3.95$ $\zeta = 3.95$

SECTION : UPRIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B/ .3170 .4120 .5070 .6020 .6970 .7920

X/C/ .4972 -.5073 -.5355 -.5592 -.5516 -.4646

.7567 -.4917 -.5183 -.5639 -.5758 -.0050 -.4726

.8525 -.4894 -.5310 -.5814 -.5926 -.5377 -.4648

.8937 -.5144 -.5712 -.5937 -.5819 -.5372 -.4556

.9898 -.5433 -.5937 -.6077 -.5781 -.5194 -.4485

$A_{\text{PFA}} (3) = 3.955$ $B_{\text{PFA}} (3) = 4.235$ $M_{\text{PFA}} = .89970$ $\theta = 599.92$ $P = 1058.7$ $R_{\text{FL}} = 3.5880$

SECTION : UPRIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B/ .3170 .4120 .5070 .6020 .6970 .7920

X/C/ .5638 -.5731 -.6115 -.6317 -.5961 -.4747

.7567 -.5477 -.5770 -.6447 -.6421 .0003 -.4678

.8525 -.5365 -.5148 -.6510 -.6551 -.5752 -.4510

.8937 -.5269 -.6626 -.6756 -.6735 -.5628 -.4604

.9898 -.5124 -.6920 -.6969 -.6252 -.5431 -.4401

$A_{\text{PFA}} (4) = 7.932$ $B_{\text{PFA}} (4) = -3.876$ $M_{\text{PFA}} = -89863$ $\theta = 599.02$ $P = 1059.8$ $R_{\text{FL}} = 3.5891$

SECTION : UPRIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B/ .3170 .4120 .5070 .6020 .6970 .7920

X/C/ .5287 -.5276 -.5618 -.5975 -.5401 -.4086

.7567 -.5056 -.5378 -.5235 -.6215 .0000 -.3965

.8525 -.4826 -.5511 -.5357 -.6249 -.5293 -.3915

.8937 -.4651 -.6115 -.6599 -.5090 -.4993 -.3798

.9898 -.4583 -.6615 -.6795 -.6033 -.4796 -.3582

$A_{\text{PFA}} (4) = 3.830$ $B_{\text{PFA}} (4) = .173$ $M_{\text{PFA}} = -89863$ $\theta = 599.02$ $P = 1059.8$ $R_{\text{FL}} = 3.5893$

SECTION : UPRIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B/ .3170 .4120 .5070 .6020 .6970 .7920

X/C/ .5127 -.5643 -.5887 -.5671 -.4743

.7567 -.5127 -.5629 -.6235 -.0000 -.4703

.8525 -.4967 -.6192 -.6174 -.5494 -.4617

.8937 -.4826 -.6377 -.5348 -.5124 -.4522

.9898 -.4652 -.6243 -.6377 -.5131 -.5233 -.4394

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CALCULATED PRESSURE DATA - DA14B (AMES 11-073-1)

PAGE ENCB

AMES 11-073(DA14B) - 110A/B/C/R SPEED BRAKE

ALPHA (4) = 8.015 BETA (3) = 4.230 MACH = .89853 Q = 599.02 P = 1059.8 RNL = 3.5892

SECTION : 110154T HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .703 -.5569 -.5931 -.6391 -.6374 -.5757 -.44448

.757 -.6549 -.5997 -.6326 -.6597 .0000 -.4318

.805 -.6557 -.6437 -.6918 -.6504 -.5489 -.4266

.857 -.6558 -.6855 -.6980 -.6417 -.5497 -.4300

.897 -.6557 -.7170 -.6659 -.6165 -.5404 -.4121

PLANE E1 = 11.973 BETA (1) = -3.851 MACH = .89910 Q = 599.49 P = 1059.5 RNL = 3.5890

SECTION : 110154T HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .703 -.5539 -.5518 -.6078 -.6336 -.5557 -.4195

.757 -.6541 -.6351 -.6462 .0000 -.4176

.805 -.6558 -.5919 -.6535 -.6504 -.5456 -.4067

.857 -.6561 -.6239 -.6899 -.6323 -.5194 -.3953

.897 -.6534 -.5745 -.6367 -.6201 -.5034 -.3714

PLANE E1 = 11.987 BETA (2) = .182 MACH = .99910 Q = 599.49 P = 1059.5 RNL = 3.5890

SECTION : 110154T HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .703 -.5555 -.5734 -.6267 -.6290 -.5684 -.4558

.757 -.5417 -.5595 -.6154 -.5455 .0000 -.4380

.805 -.6537 -.6130 -.6326 -.6321 -.5493 -.4461

.857 -.6533 -.6532 -.6635 -.5321 -.5410 -.4274

.897 -.6513 -.6524 -.6534 -.6250 -.5295 -.4059

PLANE E1 = 12.005 BETA (3) = -.250 MACH = .89910 Q = 599.49 P = 1059.5 RNL = 3.5890

SECTION : 110154T HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .703 -.5550 -.5616 -.6047 -.6313 -.5498 -.4124

.757 -.6519 -.6615 -.6777 -.6502 .0000 -.4133

.805 -.6535 -.6512 -.6307 -.6356 -.5355 -.4067

.857 -.6563 -.6570 -.6864 -.6370 -.5140 -.3965

.897 -.6535 -.6522 -.6524 -.6112 -.4339 -.3875

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPED BRAKE

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.6800 IN. X0
LREF =	.474.8000 IN.	YMRP =	.0000 IN. Y0
BREF =	936.0580 IN.	ZMRP =	375.0000 IN. Z0
SCALE =	.0300		

ALPHA (1) = -4.044 BETA (1) = -7.862 MACH = .59674

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV						
.729	-.5635	-.5904	-.6634	-.6219	-.5365	-.4109
.757	-.5624	-.6116	-.6803	-.6459	.0000	.4075
.805	-.5695	-.6434	-.7032	-.6359	.5169	-.3943
.887	-.5935	-.7030	-.7132	-.6302	.5114	-.3793
.958	-.6568	-.7202	-.6959	-.6290	.5119	-.3617

ALPHA (1) = -3.971 BETA (2) = -3.856 MACH = .59674

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV						
.708	-.5171	-.5800	-.6249	-.5965	-.5210	-.4016
.757	-.5368	-.5616	-.6510	-.6245	.0000	-.3969
.805	-.5378	-.6099	-.6622	-.6273	.5143	-.4004
.887	-.5854	-.5680	-.6862	-.6048	.4984	-.3853
.958	-.6366	-.6955	-.6300	-.5934	.4849	-.3629

ALPHA (1) = -2.94 BETA (3) = .179 MACH = .59674

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV						
.729	-.5229	-.5722	-.6522	-.6143	-.5490	-.4081
.757	-.5339	-.5923	-.6805	.6375	.0000	.4038
.805	-.5331	-.6333	-.6885	-.6465	-.5210	-.3939
.887	-.5229	-.6992	-.7359	-.6342	-.5099	-.3894
.958	-.6552	-.7231	-.6945	-.6088	.4921	-.3731

PARAMETRIC DATA

RUDDER =	-10.000	SPDRK =	55.000
BOFLAP =	16.300	L-ELVN =	-4.000
R-ELVN =	4.000	MACH =	.600

RN/L =	4.8797
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(XE8K56) (13 AUG 75)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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ALPHA (1) = -3.952 BETA (4) = 4.259 MACH = .59674 0 = 594.66 P = 2385.6 RNL = 4.8797
 SECTION 1) RIGHT HAND INSIDE
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

Z/BV	X/CY	BETA (5) = 8.230	MACH = .59674	0 = 594.66	P = 2385.6	RNL = 4.8797
.708	-.5687	-.6379	-.7039	-.6460	-.5504	-.3892
.757	-.5753	-.6534	-.7134	-.6676	.0000	-.3823
.805	-.6153	-.7052	-.7327	-.6638	-.5300	-.3802
.887	-.6741	-.7336	-.7388	-.6468	-.5072	-.3650
.958	-.7212	-.7538	-.7246	-.6204	-.4777	-.3454

ALPHA (1) = -3.367 BETA (5) = 8.230 MACH = .59674
 SECTION 1) RIGHT HAND INSIDE
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

Z/BV	X/CY	BETA (1) = -7.901	MACH = .59728	0 = 595.74	P = 2385.6	RNL = 4.8906
.758	-.6477	-.7278	-.7813	-.6579	-.4935	-.3245
.757	-.6597	-.7665	-.7813	-.6775	.0000	-.3242
.805	-.7135	-.8229	-.7913	-.6717	-.4806	-.3266
.887	-.7556	-.8373	-.7982	-.6380	-.4588	-.3175
.958	-.8115	-.8373	-.7611	-.5856	-.4094	-.3097

ALPHA (2) = .082 BETA (1) = -7.901 MACH = .59728
 SECTION 1) RIGHT HAND INSIDE
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

Z/BV	X/CY	BETA (2) = -3.873	MACH = .59728	0 = 595.74	P = 2385.6	RNL = 4.8906
.708	-.6544	-.6939	-.7967	-.7122	-.5525	-.3573
.757	-.6409	-.7202	-.7955	-.7258	.0000	-.3557
.805	-.6565	-.7643	-.8215	-.7201	-.5159	-.3481
.887	-.7270	-.8525	-.8021	-.6932	-.4940	-.3350
.958	-.7348	-.8593	-.8050	-.6464	-.4916	-.3253

ALPHA (2) = .093 BETA (2) = -3.873 MACH = .59728
 SECTION 1) RIGHT HAND INSIDE
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

Z/BV	X/CY	BETA (2) = -3.873	MACH = .59728	0 = 595.74	P = 2385.6	RNL = 4.8906
.708	-.5539	-.5939	-.5552	-.6354	-.5411	-.3876
.757	-.5596	-.6379	-.6910	-.6437	.0000	-.3947
.805	-.5729	-.6539	-.7153	-.6955	-.5233	-.3605
.887	-.6279	-.7211	-.7285	-.6338	-.4568	-.3706
.958	-.6655	-.7339	-.7191	-.6170	-.4805	-.3419

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

PAGE 6412

ALPHA (3) = 4.041 BETA (2) = -3.873 MACH = .59696 0 = 595.02 P = 2385.3 RN/L = 4.8897

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CY

.758 -.5798 -.6347 -.7101 -.6527 -.5005 -.32865

.757 -.5852 -.6472 -.7331 -.6439 -.0000 -.3245

.805 -.6045 -.7150 -.7531 -.6584 -.4772 -.3262

.887 -.6719 -.7727 -.7600 -.6282 -.4527 -.3081

.368 -.7324 -.7847 -.7379 -.5983 -.4307 -.2723

ALPHA (3) = 4.095 BETA (3) = -1.178 MACH = .59696 0 = 595.02 P = 2385.3 RN/L = 4.8897

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CY

.758 -.5825 -.6385 -.7097 -.6712 -.5666 -.3918

.757 -.5879 -.6435 -.7245 -.6869 -.0000 -.3804

.805 -.6018 -.6977 -.7381 -.6838 -.5311 -.3793

.887 -.6778 -.7626 -.7574 -.6620 -.5161 -.3635

.958 -.7275 -.7624 -.7365 -.6314 -.4872 -.3418

ALPHA (3) = 3.977 BETA (4) = 4.232 MACH = .59696 0 = 595.02 P = 2385.3 RN/L = 4.8897

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CY

.758 -.5958 -.6625 -.7182 -.6224 -.4990 -.3323

.757 -.6038 -.6289 -.7319 -.6429 -.0000 -.3364

.805 -.6405 -.7216 -.7557 -.6485 -.4874 -.3440

.887 -.6955 -.7548 -.7362 -.6246 -.4473 -.3325

.958 -.7317 -.7559 -.7034 -.5793 -.4219 -.3046

ALPHA (3) = 4.011 BETA (5) = 8.279 MACH = .59696 0 = 595.02 P = 2385.3 RN/L = 4.8897

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CY

.758 -.7202 -.9115 -.8210 -.6779 -.4993 -.2765

.757 -.7369 -.8334 -.8248 -.6940 -.0000 -.2898

.805 -.7759 -.8773 -.8227 -.6772 -.4521 -.3033

.887 -.8353 -.8865 -.8255 -.6551 -.4276 -.2921

.958 -.8560 -.8585 -.8584 -.5593 -.3726 -.2733

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 8.004 BETA (1) = -7.903 MACH = .59678 0 = 594.78 P = 2385.7 RNL = 4.8929

SECTION 1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.5809	-.6280	-.7086	-.6233	-.4663	-.2907
.757	-.5776	-.6459	-.7369	-.6442	-.0000	-.2757
.805	-.5243	-.6968	-.7489	-.6445	-.4468	-.2783
.857	-.6531	-.7703	-.7632	-.6572	-.4175	-.2653
.958	-.7421	-.7946	-.7443	-.5672	-.3781	-.2709

ALPHA (4) = 7.965 BETA (3) = .166 MACH = .59678 0 = 594.78 P = 2385.7 RNL = 4.8929

SECTION 1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.728	-.5918	-.6397	-.7192	-.6597	-.5559	-.3730
.757	-.5256	-.6613	-.7389	-.6850	-.0000	-.3569
.805	-.6193	-.7250	-.7471	-.6839	-.5325	-.3664
.857	-.6792	-.7692	-.7666	-.6525	-.4986	-.3568
.958	-.7238	-.7727	-.7483	-.6374	-.4652	-.3288

ALPHA (4) = 7.93! BETA (4) = 4.229 MACH = .59678 0 = 594.78 P = 2385.7 RNL = 4.8929

SECTION 1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.728	-.6210	-.5535	-.5992	-.5251	-.5061	-.3397
.757	-.5384	-.5652	-.7215	-.6462	-.0000	-.3363
.805	-.5355	-.7139	-.7354	-.6512	-.741	-.3275
.857	-.5804	-.7457	-.7224	-.6175	-.4624	-.3293
.958	-.7035	-.7134	-.7038	-.5797	-.4356	-.3102

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

(XE88256)

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

P = 2385.7

RN/L = 4.8929

Z/SV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-6830	-7387	-7499	-6100	-4595	-3177
.757	-6954	-7551	-7530	-6420	.0000	.3232
.625	-7169	-7723	-7570	-6373	-4564	.3279
.697	-7540	-8039	-7295	-6085	-4275	.3247
.929	-7714	-7870	-6754	-5216	-3895	.3123

ALPHA (5) = 11.920 BETA (1) = -7.867 MACH = .59670

P = 2385.8

RN/L = 4.8946

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/SV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758	-6478	-7067	-8043	-6658	-4268	-2372
.757	-6297	-7213	-8231	-6867	.0000	.2422
.805	-6580	-7908	-8431	-6554	-3925	.2384
.897	-7127	-8627	-8322	-6215	-3656	.2444
.958	-8131	-6765	-8057	-6018	-5571	.2470

ALPHA (5) = 11.942 BETA (2) = -3.850 MACH = .59670

P = 2385.8

RN/L = 4.8946

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/SV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.759	-5787	-6181	-6926	-6375	-4899	-3174
.757	-5793	-6392	-7158	-6589	.0000	.3129
.825	-63 ⁰⁰ 4	-6375	-7475	-6458	-4564	.3029
.897	-6545	-7532	-7702	-6209	-4403	.2909
.963	-7332	-7631	-7393	-5953	-4111	.2634

ALPHA (5) = 12.055 BETA (3) = .165 MACH = .59670

P = 2385.8

RN/L = 4.8946

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/SV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.758	-5935	-6565	-7391	-6800	-5421	-3638
.757	-6091	-6706	-7514	-5954	.0000	.3507
.825	-6235	-7359	-7754	-6361	-5238	.3574
.897	-6835	-7612	-7779	-5527	-5020	.3392
.963	-7322	-7924	-7564	-5333	-4609	.3089

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TABULATED PRESSURE DATA - OA148 (AMES 11-075-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE

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(13 AUG 75)

REFERENCE DATA

	X-CR	Y-CR	Z-CR	RUDDER =	BDFLAP =	SPDBRK =	55.000
SREF	2590.0000 SC.FT.	XHPP =	1076.6800 IN. X0	10.000	16.300	L-ELVN =	4.000
LREF	.474.8000 IN.	YHPP =	.0000 IN. Y0			MACH =	1.400
SREF	936.0560 IN.	ZHPP =	.375.0000 IN. Z0				
SCALE	.0300						
ALPHA (1)	-4.026	BETA (1)	-3.843	MACH = 1.3927	0	= 599.59	P = 441.59
SECTION : RIGHT HAND INSIDE				DEPENDENT VARIABLE CP			
Z-BY	.3170	.4120	.5070	.6020	.6970	.7920	
X-CV							
.758	-.6027	-.5864	-.5915	-.5935	-.5808	-.5595	
.757	-.5919	-.5937	-.5938	-.5922	-.0000	-.5595	
.825	-.5769	-.5962	-.5977	-.5932	-.5815	-.5591	
.857	-.5745	-.5837	-.5919	-.5865	-.5719	-.5482	
.858	-.5769	-.5933	-.5903	-.5865	-.5719	-.5436	
ALPHA (1)	-3.938	SETA (2)		.202 MACH = 1.3927	0	= 599.59	P = 441.59
SECTION : RIGHT HAND INSIDE				DEPENDENT VARIABLE CP			
Z-BY	.3170	.4120	.5070	.6020	.6970	.7920	
X-CV							
.758	-.6027	-.5864	-.5915	-.5935	-.5808	-.5595	
.757	-.5919	-.5937	-.5938	-.5922	-.0000	-.5595	
.825	-.5769	-.5962	-.5977	-.5932	-.5815	-.5591	
.857	-.5745	-.5837	-.5919	-.5865	-.5719	-.5482	
.858	-.5769	-.5933	-.5903	-.5865	-.5719	-.5436	
ALPHA (1)	-4.001	SETA (3)		.4282 MACH = 1.3927	0	= 599.59	P = 441.59
SECTION : RIGHT HAND INSIDE				DEPENDENT VARIABLE CP			
Z-BY	.3170	.4120	.5070	.6020	.6970	.7920	
X-CV							
.758	-.5236	-.5993	-.5074	-.6038	-.5894	-.5572	
.757	-.5858	-.5938	-.5916	-.6048	-.0000	-.5577	
.825	-.5329	-.5954	-.6145	-.6102	-.5892	-.5558	
.857	-.5567	-.6024	-.6173	-.6093	-.5856	-.5503	
.858	-.5314	-.6100	-.6194	-.6003	-.5818	-.5300	

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6A17

AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE
 $\alpha_{\text{PH4}} + 2) = .015 \quad \beta_{\text{TA}} (1) = -3.865 \quad \text{MACH} = 1.3931 \quad a = 599.59 \quad p = 441.36 \quad r/n/l = 2.9052$

SECTION 1 (RIGHT HAND INSIDE)
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .708 -.6127 -.5938 -.5986 -.5969 -.5867 -.5640

.757 -.5995 -.5931 -.6021 -.5988 .0000 -.5640

.805 -.5853 -.5979 -.6031 -.5993 -.5863 -.5645

.887 -.58250 -.5981 -.6021 -.5993 -.5865 -.5505

.959 -.5979 -.5052 -.5974 -.5981 -.5850 -.5545

$\alpha_{\text{PH4}} + 2) = .021 \quad \beta_{\text{TA}} (2) = .195 \quad \text{MACH} = 1.3931 \quad a = 599.59 \quad p = 441.36 \quad r/n/l = 2.9052$

SECTION 1 (RIGHT HAND INSIDE)
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .759 -.6137 -.5939 -.5988 -.5974 -.5877 -.5673

.757 -.5921 -.5932 -.6038 -.6002 .0000 -.5669

.805 -.5895 -.5941 -.6059 -.6012 -.5886 -.5676

.887 -.5875 -.5970 -.6056 -.6000 -.5855 -.5648

.959 -.5939 -.6024 -.6073 -.5957 -.5856 -.5565

$\alpha_{\text{PH4}} + 2) = .016 \quad \beta_{\text{TA}} (3) = .4.262 \quad \text{MACH} = 1.3931 \quad a = 599.59 \quad p = 441.36 \quad r/n/l = 2.9052$

SECTION 1 (RIGHT HAND INSIDE)
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .708 -.6098 -.6013 -.6124 -.6169 -.6030 -.5694

.757 -.5964 -.5993 -.6181 -.6181 .0000 -.5679

.805 -.5855 -.5822 -.6217 -.6181 -.5985 -.5663

.887 -.5833 -.6107 -.6243 -.6151 -.5956 -.5607

.959 -.5977 -.6115 -.6257 -.6131 -.5923 -.5401

$\alpha_{\text{PH4}} + 3) = 3.903 \quad \beta_{\text{TA}} (1) = -3.867 \quad \text{MACH} = 1.3926 \quad a = 599.48 \quad p = 441.53 \quad r/n/l = 2.9053$

SECTION 1 (RIGHT HAND INSIDE)
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .708 -.6143 -.6013 -.6202 -.6012 -.5976 -.5682

.757 -.5930 -.5949 -.6125 -.6104 .0000 -.5673

.805 -.5825 -.6021 -.6151 -.6118 -.5952 -.5680

.887 -.5839 -.6021 -.6184 -.6106 -.5924 -.5644

.959 .1 -.6154 -.6187 -.6293 -.5907 -.5597

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\text{ALPHA} (3) = 4.005 \quad \text{BETA} (2) = .137 \quad \text{MACH} = 1.3926 \quad 0 = 599.48 \quad P = 441.59 \quad R/V/L = 2.9053$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.729	-.6127	-.5954	-.6029	-.6019	-.5913	-.5702
.757	-.5939	-.6059	-.6069	-.6045	.0000	-.5714
.805	-.5917	-.5974	-.6093	-.6053	-.5939	-.5724
.887	-.5931	-.6024	-.6107	-.6034	-.5913	-.5714
.958	-.5931	-.6081	-.6105	-.6001	-.5894	-.5643

 $\text{ALPHA} (3) = 3.907 \quad \text{BETA} (3) = 4.252 \quad \text{MACH} = 1.3926 \quad 0 = 599.48 \quad P = 441.59 \quad R/V/L = 2.9053$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.728	-.6164	-.6026	-.6082	-.6125	-.6002	-.5751
.757	-.5981	-.6035	-.6144	-.6148	.0000	-.5756
.805	-.5957	-.6031	-.6177	-.6158	-.5978	-.5744
.887	-.5963	-.6055	-.6207	-.6132	-.5957	-.5723
.958	-.5972	-.6159	-.6205	-.6036	-.5942	-.5579

 $\text{ALPHA} (4) = 7.945 \quad \text{BETA} (4) = -3.862 \quad \text{MACH} = 1.3931 \quad 0 = 599.59 \quad P = 441.35 \quad R/V/L = 2.8959$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.728	-.6174	-.6055	-.6171	-.6197	-.6097	-.5740
.757	-.5985	-.6063	-.6216	-.6216	.0000	-.5723
.805	-.5973	-.6077	-.6230	-.6216	-.6047	-.5718
.887	-.5913	-.6135	-.6242	-.6208	-.6012	-.5686
.958	-.5932	-.6155	-.6253	-.6216	-.5993	-.5631

 $\text{ALPHA} (4) = 7.917 \quad \text{BETA} (2) = .187 \quad \text{MACH} = 1.3931 \quad 0 = 599.59 \quad P = 441.35 \quad R/V/L = 2.8959$

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.728	-.6198	-.6042	-.6071	-.6085	-.5971	-.5775
.757	-.5935	-.6026	-.6123	-.6116	.0000	-.5789
.805	-.5913	-.6036	-.6149	-.6125	-.5995	-.5801
.887	-.5903	-.6085	-.6161	-.6097	-.5959	-.5769
.958	-.5913	-.6111	-.6159	-.6059	-.5935	-.5734

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB SPEED BRAKE (XEBK57)

ALPHA (4) = 7.848 BETA (3) = 4.251 MACH = 1.3931 Q = 599.59 P = 441.36 RNL = 2.8959
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.6167	-.6030	-.6095	-.6083	-.5981	-.5745
.757	-.5385	-.6016	-.6121	-.6109	.0000	-.5754
.805	-.5926	-.6030	-.6128	-.6125	-.5988	-.5749
.897	-.5366	-.6076	-.6137	-.6130	-.5974	-.5742
.959	-.5366	-.6094	-.6128	-.6130	-.5962	-.5666

ALPHA (5) = 11.907 BETA (1) = -3.847 MACH = 1.3946 Q = 600.23 P = 440.88 RNL = 2.9052
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
------	-------	-------	-------	-------	-------	-------

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.6233	-.6136	-.6218	-.6263	-.6166	-.5830
.757	-.6046	-.6121	-.6270	-.6284	.0000	-.5813
.805	-.6029	-.6140	-.6289	-.6273	-.6114	-.5806
.887	-.6082	-.6198	-.6294	-.6268	-.6071	-.5764
.958	-.6100	-.6231	-.6315	-.6268	-.6045	-.5689

ALPHA (5) = 11.890 BETA (2) = -1.86 MACH = 1.3946 Q = 600.23 P = 440.88 RNL = 2.9052
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
------	-------	-------	-------	-------	-------	-------

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.6211	-.6065	-.6109	-.6126	-.6012	-.5814
.757	-.6022	-.6050	-.6154	-.6149	.0000	-.5833
.805	-.6013	-.6059	-.6178	-.6159	-.6043	-.5849
.887	-.6024	-.6122	-.6185	-.6138	-.6019	-.5847
.958	-.6020	-.6183	-.6166	-.6102	-.6000	-.5793

ALPHA (5) = 11.984 BETA (3) = 4.265 MACH = 1.3946 Q = 600.23 P = 440.88 RNL = 2.9052
 SECTION 1) RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
------	-------	-------	-------	-------	-------	-------

Z/BV	.779	.6222	.6088	.6133	-.6148	-.6044	-.5826
X/CV							
.757	-.5135	-.6131	-.6157	-.6164	.0000	-.5838	
.805	-.5133	-.6138	-.6174	-.6174	-.6063	-.5835	
.887	-.5137	-.6129	-.6183	-.6162	-.6039	-.5811	
.958	-.5125	-.6173	-.6164	-.6164	-.6039	-.5752	

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TABLED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE						
SECTION 1: LEFT HAND INSIDE						
DEPENDENT VARIABLE CP						
α_{beta} = 15.871	β_{beta} = 11	γ_{beta} = -3.822	MACH = 1.3964	θ = 598.94	P = 438.77	RNL = 2.9066
2.37	.3170	.4120	.5370	.6020	.6970	.7920
X CV						
-1.58	-.6256	-.6253	-.5347	-.6109	-.6314	-.5968
.757	-.6195	-.6265	-.6334	-.6420	-.0000	-.5949
.615	-.6136	-.6234	-.6425	-.6423	-.6262	-.5927
.617	-.6227	-.6302	-.6428	-.6409	-.6228	-.5942
.613	-.6269	-.6345	-.6432	-.6411	-.6188	-.5757
α_{beta} = 15.833	β_{beta} = 21	γ_{beta} = 187	MACH = 1.3964	θ = 598.94	P = 438.77	RNL = 2.9056
SECTION 1: LEFT HAND INSIDE						
2.37	.3170	.4120	.5370	.6020	.6970	.7920
X CV						
.757	-.6316	-.6165	-.6239	-.6246	-.6125	-.5935
.615	-.6147	-.6161	-.5281	-.6274	-.0000	-.5945
.617	-.6121	-.6183	-.6315	-.6277	-.6149	-.5969
.613	-.6124	-.6218	-.6334	-.6251	-.6116	-.5952
α_{beta} = 15.915	β_{beta} = 30	γ_{beta} = 292	MACH = 1.3964	θ = 598.94	P = 438.77	RNL = 2.9066
SECTION 1: LEFT HAND INSIDE						
2.6V	.3170	.4120	.5370	.6020	.6970	.7920
X CV						
.757	-.6311	-.6215	-.6295	-.6277	-.6205	-.5963
.615	-.6143	-.6216	-.6329	-.5291	-.0000	-.5956
.617	-.6102	-.6247	-.6339	-.6298	-.6185	-.5958
.613	-.6152	-.6365	-.6329	-.6315	-.6172	-.5889

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1079.6801 IN. CORDS = 2590.0000 SQ.FT.

PARAMETRIC DATA

$\text{SECTION } 1: \text{RIGHT HAND INSIDE}$

$$P = 550.87 \quad R/V/L = 3.010$$

• 3:70 .4120 .5070 .6020 .6970 .7920

SECTION : MIGHT HAND INSIDE

$$P = 550.87 \text{ Pa/L} = 3.0101$$

SECTION I - PRELIMINARY STATEMENT
DEPARTMENT VARIABLE CP
4-2830 MACCH = 1-2474

$$P = 550.87 \quad RNL = 3.0101$$

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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ALPHA : 31 = 3.929 E TAU (2) = .192 MACH = 1.2467 Q = 599.84 P = 551.34 RN/L = 3.0120
 SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.7278 -.7105 -.7183 -.7194 -.7074 -.6721
 .757 -.6990 -.7081 -.7239 -.7235 .0000 -.6714
 .805 -.7013 -.7084 -.7289 -.7237 -.7060 -.6723
 .857 -.6989 -.7163 -.7329 -.7204 -.7095 -.6713
 .908 -.7001 -.7220 -.7353 -.7187 -.6967 -.6625

ALPHA : 31 = 3.933 E TAU (3) = 4.251 MACH = 1.2467 Q = 599.84 P = 551.34 RN/L = 3.0120
 SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.7471 -.7222 -.7298 -.7350 -.7248 -.6864
 .757 -.7170 -.7217 -.7348 -.7402 -.0000 -.6859
 .805 -.7166 -.7231 -.7398 -.7405 -.7229 -.6883
 .857 -.7129 -.7284 -.7435 -.7372 -.7168 -.6826
 .908 -.7184 -.7355 -.7412 -.7336 -.7153 -.6755

ALPHA : 41 = 7.965 E TAU (1) = -3.855 MACH = 1.2463 Q = 599.67 P = 551.57 RN/L = 3.0105
 SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.7255 -.7168 -.7328 -.7343 -.7151 -.6627
 .757 -.6971 -.7137 -.7376 -.7371 .0000 -.6591
 .805 -.6989 -.7187 -.7393 -.7376 -.7063 -.6589
 .857 -.7054 -.7227 -.7425 -.7352 -.7025 -.6540
 .908 -.7099 -.7250 -.7454 -.7393 -.7030 -.6450

ALPHA : 41 = 7.970 E TAU (2) = 1.87 MACH = 1.2463 Q = 599.67 P = 551.57 RN/L = 3.0105
 SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.7127 -.7033 -.7181 -.7198 -.7027 -.6573
 .757 -.6972 -.7032 -.7225 -.7219 .0000 -.6577
 .805 -.6577 -.7056 -.7068 -.7238 -.6973 -.6587
 .857 -.6295 -.7105 -.7330 -.7221 -.6599 -.6537
 .908 -.6039 -.7164 -.7354 -.7217 -.6873 -.6459

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DATE 14 FEB 76

TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE
 SECTION : RIGHT HAND INSIDE
 Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV

α = 7.894 β = 1.31 MACH = 1.2463 0 = 599.67 P = 551.57 RNL = 3.0105

DEPENDENT VARIABLE CP

α = 11.923 β = 1.1 = -3.838 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.925 β = 1.31 = 4.259 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.923 β = 1.1 = -3.838 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.925 β = 1.31 = 4.259 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.923 β = 1.1 = -3.838 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.925 β = 1.31 = 4.259 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.923 β = 1.1 = -3.838 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.925 β = 1.31 = 4.259 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV α = 11.931 β = 2.1 = 1.97 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114

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(XEBK58)

DATE : 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6425

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

(XE8K59) (13 AUG 75)

REFERENCE DATA

PARAMETRIC DATA			
RUDDER = 10.000	SPDRK = 55.000	L-ELVN = 4.000	
BDFLAP = 16.300	R-ELVN = 1.100	MACH =	
R-ELVN = -4.000			
(XE8K59) (13 AUG 75)			
X, CV	Y, CV	Z, CV	
ALPHA (1) = -4.025	BETA (1) = -3.831	MACH = 1.1006	Q = 600.08 P = 707.67 RN/L = 3.1805
SECTION 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP			
2.8V	.3173 .4120	.5070 .6020	.6970 .7920
X, CV	Y, CV	Z, CV	
ALPHA (1) = -3.894	BETA (2) = .203	MACH = 1.1006	Q = 600.08 P = 707.67 RN/L = 3.1805
SECTION 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP			
2.8V	.3173 .4120	.5070 .6020	.6970 .7920
X, CV	Y, CV	Z, CV	
ALPHA (1) = -4.013	BETA (3) = 4.281	MACH = 1.1006	Q = 600.08 P = 707.67 RN/L = 3.1805
SECTION 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP			
2.8V	.3173 .4120	.5070 .6020	.6970 .7920

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-07310A14B) -140A/B/C/R ORB SPEED BRAKE

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ALPHA (2) = .05:	BETA (1) = .3170	MACH = 1.1008	Q = 600.03	P = 707.43	RN/L = 3.1794	(XE8K59)
SECTION : RIGHT HAND INSIDE						
DEPENDENT VARIABLE CP						
2.8V	.3170 .4120 .5070	.6020 .6970 .7920				
X, CV						
.708	-.7848	-.7831	-.9083	-.8185	-.7972	-.7248
.757	-.7514	-.7915	-.8195	-.8244	.0000	.7272
.865	-.75C9	-.7643	-.83C1	-.9265	-.7853	-.7270
.887	-.7654	-.8202	-.8+10	-.8244	-.7732	-.7170
.958	-.7745	-.8146	-.8+39	-.8192	-.7718	-.7116
ALPHA (2) = .053	BETA (2) = .3170	MACH = 1.1008	Q = 600.03	P = 707.43	RN/L = 3.1794	
SECTION : RIGHT HAND INSIDE						
DEPENDENT VARIABLE CP						
2.8V	.3170 .4120 .5070	.6020 .6970 .7920				
X, CV						
.705	-.7710	-.7708	-.7989	-.8043	-.7877	-.7122
.757	-.7429	-.7635	-.8255	-.8129	.0000	.7119
.805	-.74C2	-.7689	-.8162	-.8136	-.7728	-.7103
.887	-.7532	-.7851	-.8265	-.8114	-.7657	-.7074
.958	-.7532	-.8014	-.8251	-.8099	-.7593	-.6960
ALPHA (2) = .049	BETA (3) = .3170	MACH = 1.1008	Q = 600.03	P = 707.43	RN/L = 3.1794	
SECTION : RIGHT HAND INSIDE						
DEPENDENT VARIABLE CP						
2.8V	.3170 .4120 .5070	.6020 .6970 .7920				
X, CV						
.705	-.7643	-.7721	-.7924	-.8223	-.7836	-.7105
.757	-.7423	-.7832	-.8217	-.8107	.0000	.7034
.805	-.7445	-.7627	-.8109	-.8133	-.7738	-.7025
.887	-.7517	-.7436	-.8155	-.8114	-.7678	-.6946
.958	-.7517	-.7235	-.8239	-.8295	-.7577	-.6806
ALPHA (2) = .055	BETA (4) = .3170	MACH = 1.1009	Q = 600.17	P = 707.44	RN/L = 3.1827	
SECTION : RIGHT HAND INSIDE						
DEPENDENT VARIABLE CP						
2.8V	.3170 .4120 .5070	.6020 .6970 .7920				
X, CV						
.705	-.7531	-.7535	-.7535	-.6573	-.7848	-.7026
.757	-.7427	-.7526	-.8200	-.8118	.0000	.7028
.805	-.7445	-.7635	-.8255	-.8153	-.7675	-.7040
.887	-.7517	-.7235	-.8291	-.8127	-.7621	-.6992
.958	-.7517	-.7232	-.8231	-.8192	-.7555	-.6900

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6427

AMES 11-073(1148) -140A/B/C/R ORB SPEED BRAKE

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708 -.7354 -.7357 -.7552 -.7739 -.7540 -.6790
.757 -.7097 -.7340 -.7711 -.7610 .0000 -.6804
.805 -.7102 -.7352 -.7826 -.7798 -.7438 -.6818
.887 -.7163 -.7530 -.7954 -.7786 -.7344 -.6797
.958 -.7262 -.7701 -.8009 -.7786 -.7270 -.6740

ALPHA (3) = 3.966 BETA (2) = 4.249 MACH = 1.1009 0 = 600.17 P = 707.44 RN/L = 3.1827

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708 -.7595 -.7557 -.7907 -.7973 -.7722 -.6987
.757 -.7356 -.7505 -.7953 -.8023 .0000 -.6970
.805 -.7304 -.7642 -.8027 -.8091 -.7627 -.7009
.887 -.7403 -.7744 -.8186 -.8197 -.7558 -.6944
.958 -.7498 -.7867 -.8243 -.8287 -.7537 -.6764

ALPHA (4) = 7.908 BETA (1) = -3.848 MACH = 1.0993 0 = 599.26 P = 708.35 RN/L = 3.1817

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708 -.7652 -.7559 -.7925 -.8013 -.7738 -.6962
.757 -.7420 -.7645 -.8091 -.8093 .0000 -.6981
.805 -.7437 -.7763 -.8179 -.8074 -.7519 -.6984
.887 -.7609 -.7872 -.8227 -.8259 -.7495 -.6999
.958 -.7625 -.8002 -.8231 -.8243 -.7408 -.6907

ALPHA (4) = 7.912 BETA (2) = 1.89 MACH = 1.0993 0 = 599.26 P = 708.35 RN/L = 3.1817

SECTION (1) RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

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.708 -.7227 -.7323 -.7528 -.7705 -.7502 -.5720
.757 -.7022 -.7233 -.7537 -.7751 -.6556 -.6598
.805 -.7112 -.7462 -.7612 -.7775 -.7563 -.6756
.887 -.7212 -.7635 -.7812 -.7761 -.7225 -.6845
.958 -.7235 -.7835 -.7912 -.7771 -.7271 -.6993

AMES 11-0-3(OA148) - 140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

PARAMETRIC DATA						
SPDBRK =	10.000	SPDBRK =	55.000	L-ELVN =	4.000	
BDFLAP =	16.300	R-ELVN =	.900	MACH =		
R-ELVN =	-4.000					
(XE8K601) (13 AUG 75)						
SECTION 1: RIGHT HAND INSIDE						
DEPENDENT VARIABLE CP						
Z/BY .3170 .4120 .5070 .6020 .6970 .7920						
ALPHA (1) = -4.025 BETA (1) = -3.841 MACH = .89803	0	=	598.77	P	=	1060.7
Z/GY .3:70 .4:120 .5:070 .6:020 .6:970 .7:920						
ALPHA (1) = -4.026 BETA (2) = .202 MACH = .89803	0	=	598.77	P	=	1060.7
SECTION 1: RIGHT HAND INSIDE						
DEPENDENT VARIABLE CP						
Z/GY .3:70 .4:120 .5:070 .6:020 .6:970 .7:920						
ALPHA (1) = -3.984 BETA (3) = 4.285 MACH = .89803	0	=	598.77	P	=	1060.7
SECTION 1: RIGHT HAND INSIDE						
DEPENDENT VARIABLE CP						
Z/BY .3:70 .4:120 .5:070 .6:020 .6:970 .7:920						
ALPHA (1) = -3.984 BETA (3) = 4.285 MACH = .89803	0	=	598.77	P	=	1060.7
Z/GY .3:70 .4:120 .5:070 .6:020 .6:970 .7:920						

AMES 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE							(XEBK60)	
ALPHA (2) = .056	BETA (1) = -3.856	MACH = .89813	0	= 598.75	P	= 1060.5	RNL = 3.5631	
SECTION 1 : RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3173	.4120	.5070	.6020	.6970	.7920		
X, CV								
.758	- .5377	- .5625	- .6088	- .6291	- .6050	- .4985		
.757	- .5234	- .5692	- .6312	- .6290	- .0000	- .4954		
.905	- .5274	- .5743	- .6584	- .6438	- .5837	- .4872		
.887	- .5509	- .6165	- .5623	- .6419	- .5745	- .4801		
.368	- .5826	- .6339	- .6644	- .6319	- .5771	- .4687		
ALPHA (2) = .056	BETA (2) =		.186	MACH = .89813	0	= 598.75	P	= 1060.5
SECTION 1 : RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X, CV								
.753	- .4681	- .4868	- .5276	- .5550	- .5423	- .4574		
.757	- .4569	- .4981	- .5456	- .5514	- .0000	- .4541		
.665	- .4775	- .5119	- .5529	- .5592	- .5267	- .4536		
.897	- .4577	- .5321	- .5887	- .5673	- .5186	- .4501		
.358	- .5027	- .5557	- .5967	- .5650	- .5170	- .4430		
ALPHA (2) = .048	BETA (3) =		.4260	MACH = .89813	0	= 598.75	P	= 1060.5
SECTION 1 : RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X, CV								
.758	- .4446	- .4923	- .5222	- .5409	- .5137	- .4191		
.751	- .4515	- .4785	- .5383	- .5445	- .0000	- .4148		
.835	- .4676	- .4922	- .5661	- .5570	- .4975	- .4136		
.891	- .4972	- .5253	- .5920	- .5618	- .4857	- .4145		
.295	- .5116	- .5559	- .5733	- .5554	- .4885	- .3967		
ALPHA (2) = .075	BETA (1) =		-3.861	MACH = .89723	0	= 597.99	P	= 1061.2
SECTION 1 : RIGHT HAND INSIDE								
DEPENDENT VARIABLE CP								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X, CV								
.751	- .5186	- .5741	- .6162	- .6440	- .6016	- .4696		
.745	- .5379	- .5770	- .6510	- .5476	- .0000	- .4696		
.847	- .5037	- .5931	- .6123	- .6590	- .5824	- .4696		
.847	- .5661	- .6319	- .6720	- .6500	- .5676	- .4512		
.244	- .5853	- .6515	- .6833	- .6474	- .5689	- .4455		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 110A/B/C/R DRB SPEED BRAKE									
SECTION 1: RIGHT HAND INSIDE									
DEPENDENT VARIABLE CP									
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X, CV	- .4695	- .4994	- .5321	- .5631	- .5972	- .4663			
X, CB	- .4743	- .4973	- .5598	- .5769	- .6003	- .4594			
X, CT	- .4795	- .5141	- .5726	- .5869	- .5273	- .4604			
X, CR	- .4847	- .5377	- .5956	- .5924	- .5214	- .4460			
X, CS	- .5084	- .5697	- .6056	- .5755	- .5290	- .4453			
ALPHA (3) = 3.94	BETA (3) = 4.252	MACH =	.89723	0	= 597.99	P =	1061.2	RNL =	3.5607
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/B:	.3170	.4120	.5070	.6020	.6970	.7920			
X, CV	- .4849	- .4898	- .5622	- .5642	- .5284	- .4060			
X, CB	- .4855	- .4883	- .5584	- .5504	- .5000	- .4036			
X, CT	- .4939	- .5355	- .5589	- .5609	- .5035	- .3993			
X, CR	- .5033	- .5613	- .5624	- .5552	- .5016	- .3883			
X, CS	- .5293	- .5934	- .6181	- .6124	- .4933	- .3884			
ALPHA (4) = 8.028	BETA (2) = 1.94	MACH =	.89903	0	= 599.30	P =	1059.3	RNL =	3.5654
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X, CV	- .5602	- .5917	- .6567	- .6484	- .5863	- .4576			
X, CB	- .5557	- .5732	- .5710	- .5603	.0000	- .4524			
X, CT	- .5902	- .5105	- .6826	- .6558	- .5799	- .4398			
X, CR	- .5933	- .6513	- .6527	- .6515	- .5569	- .4252			
X, CS	- .6543	- .6543	- .7037	- .6468	- .5681	- .4255			
ALPHA (4) = 8.028	BETA (2) = 1.94	MACH =	.89903	0	= 599.30	P =	1059.3	RNL =	3.5654

DATE 11-20-73

REGULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6432

AMES 11-072:OA148: -140A/B/C/R ORB SPEED BRAKE

(XEB60)

SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

(XEB60)

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SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

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SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

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SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

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SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

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SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

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SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

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SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

(XEB60)

(XEB60)

SECTION : 1/RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

(XEB60)

(XEB60)

DATE 11-AUG-75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R SPEED BRAKE

REFERENCE DATA

SECF = 2032.0000 SQ.FT.	XMP = 1076.6600 IN. X0	RUDDER = 10.000	SPDBRK = 55.000
LATE = .774.8000 IN.	YMP = .0000 IN. Y0	BOFLAP = 16.300	L-ELVN = 4.000
BFLP = .935.6500 IN.	ZMP = .375.0000 IN. Z0	R-ELVN = -.4.000	MACH = .600
SCDE = .0500			
ALPHA (1) = -4.014	BETA (1) = -7.854	MACH = .59638	P = 2386.5
SECTION : RIGHT HAND INSIDE	DEPENDENT VARIABLE CP		RNL = 4.8411
2.31 .3170 .4120 .5070	.6020	.6970 .7920	

2.31 .5681 -.5681	-.7595 -.7595	-.7516 -.7516	-.6570 -.6570	-.5576 -.5576	-.3932
.5671 -.5671	-.7390 -.7390	-.7594 -.7594	-.6770 -.6770	.0000 .0000	-.3653
.5671 -.5671	-.7422 -.7422	-.7555 -.7555	-.6753 -.6753	-.5195 -.5195	-.3634
.5671 -.5671	-.7521 -.7521	-.7635 -.7635	-.6792 -.6792	-.5209 -.5209	-.3544
.5671 -.5671	-.7735 -.7735	-.749 -.749	-.6335 -.6335	-.5605 -.5605	-.3798
ALPHA (1) = -3.998	BETA (2) = -3.832	MACH = .59638	P = 2386.5	RNL = 4.8411	
SECTION : RIGHT HAND INSIDE	DEPENDENT VARIABLE CP				
2.31 .3170 .4120 .5070	.6020	.6970 .7920			

2.31 .5550 -.5550	-.6088 -.6088	-.6732 -.6732	-.6406 -.6406	-.5657 -.5657	-.4148
.5557 -.5557	-.6391 -.6391	-.6368 -.6368	-.6511 -.6511	.0000 .0000	-.4041
.5557 -.5557	-.6374 -.6374	-.6358 -.6358	-.6518 -.6518	-.5329 -.5329	-.3936
.5557 -.5557	-.6372 -.6372	-.6355 -.6355	-.6473 -.6473	.5206 .5206	-.3768
.5557 -.5557	-.5939 -.5939	-.6782 -.6782	-.7153 -.7153	-.6492 -.6492	-.5389 -.5389
ALPHA (1) = -3.980	BETA (3) =	.201	MACH = .59638	P = 2386.5	RNL = 4.8411
SECTION : RIGHT HAND INSIDE	DEPENDENT VARIABLE CP				
2.31 .3170 .4120 .5070	.6020	.6970 .7920			

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RELATED PRESSURE DATA - CALIBRATED AMES II-073-1

DATE 14 FEB 76 TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073-1 (OA148) - 140A/B/C/R ORB SPEED BRAKE							(XERK61)	
SECTION 1) RIGHT HAND INSIDE			DEPENDENT VARIABLE CP				RNL = 4.8534	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.703	-.7031	-.7273	-.7483	-.6390	-.4902	-.3312		
.757	-.6650	-.7339	-.7601	-.6514	.0000	-.3215		
.805	-.6597	-.7638	-.7715	-.6549	-.4916	-.3260		
.857	-.6831	-.7842	-.7547	-.6597	-.5073	-.3388		
.968	-.7045	-.7664	-.7445	-.6734	-.5118	-.3374		
ALPHA (4) = 8.037	BETA (2) = -3.847	MACH =		.59720	0	= 595.49	P	= 2385.3
SECTION 1) RIGHT HAND INSIDE			DEPENDENT VARIABLE CP				RNL = 4.8534	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.708	-.6012	-.6398	-.6952	-.6316	-.5286	-.3597		
.757	-.5798	-.6424	-.7165	-.6539	.0000	-.3500		
.805	-.5344	-.6621	-.7175	-.6572	-.4999	-.3398		
.857	-.5957	-.7291	-.6565	-.5655	-.5059	-.3591		
.968	-.6119	-.7139	-.7293	-.6554	-.5391	-.3724		
ALPHA (4) = 8.042	BETA (3) = .195	MACH =	.53720	0	= 595.49	P	= 2385.3	RNL = 4.8534
SECTION 1) RIGHT HAND INSIDE			DEPENDENT VARIABLE CP				RNL = 4.8534	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.708	-.5952	-.6267	-.7052	-.6604	-.5933	-.4005		
.757	-.5693	-.6262	-.7144	-.6727	.0000	-.3911		
.805	-.5780	-.5641	-.7253	-.6831	-.5445	-.3775		
.857	-.6050	-.5647	-.7345	-.6685	-.5300	-.3710		
.968	-.6311	-.7272	-.7457	-.6711	-.5371	-.3611		
ALPHA (4) = 7.950	BETA (4) = 4.251	MACH =	.59720	0	= 595.49	P	= 2385.3	RNL = 4.8534
SECTION 1) RIGHT HAND INSIDE			DEPENDENT VARIABLE CP				RNL = 4.8534	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY								
.708	-.5746	-.6193	-.5993	-.6395	-.4932	-.2985		
.757	-.5605	-.6242	-.7346	-.6454	.0000	-.2855		
.805	-.5718	-.6562	-.7536	-.6336	-.4548	-.2928		
.857	-.5994	-.7164	-.7762	-.6348	-.4479	-.2911		
.968	-.5439	-.7555	-.7634	-.6217	-.4555	-.3052		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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$\text{ALPHA} (+) = 7.955 \quad \text{BETA} (+5) = 8.305 \quad \text{MACH} = .59720 \quad Q = 595.49 \quad P = 2385.3 \quad RN/L = 4.8534$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-.6343	-.6714	-.7905	-.6515	-.4432	-.2301
.757	-.6185	-.6663	-.9181	-.6840	.0030	-.2481
.805	-.6310	-.7518	-.8398	-.6496	-.3996	-.2389
.853	-.6917	-.8178	-.8611	-.6122	-.3636	-.2429
.901	-.7351	-.8923	-.8473	-.5722	-.3406	-.2522

$\text{ALPHA} (+5) = 11.942 \quad \text{BETA} (+1) = -7.853 \quad \text{MACH} = .59660 \quad Q = 594.44 \quad P = 2386.0 \quad RN/L = 4.8439$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-.7452	-.7384	-.6589	-.5069	-.3656	
.757	-.6833	-.7592	-.7824	-.6556	.0000	-.3464
.805	-.6937	-.7963	-.7718	-.6942	-.5129	-.3355
.853	-.7235	-.7745	-.7457	-.6973	-.5519	-.3417
.901	-.7355	-.7775	-.762	-.6753	-.5799	-.3715

$\text{ALPHA} (+5) = 11.952 \quad \text{BETA} (+2) = -3.827 \quad \text{MACH} = .59660 \quad Q = 594.44 \quad P = 2386.0 \quad RN/L = 4.8439$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-.8064	-.6547	-.7044	-.6369	-.5182	-.3427
.757	-.6542	-.5521	-.7187	-.6426	.0000	-.3381
.805	-.6842	-.6826	-.7421	-.6547	-.5038	-.3429
.853	-.6938	-.7031	-.7517	-.6409	-.5099	-.3343
.901	-.6945	-.7036	-.7534	-.6473	-.5037	-.3473

$\text{ALPHA} (+5) = 11.957 \quad \text{BETA} (+3) = .197 \quad \text{MACH} = .59660 \quad Q = 594.44 \quad P = 2386.0 \quad RN/L = 4.8439$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.709	-.6513	-.6411	-.7059	-.6755	-.5781	-.3873
.757	-.6512	-.6345	-.7325	-.6971	.0000	-.3909
.805	-.6576	-.6592	-.7532	-.6876	-.5444	-.3833
.853	-.6510	-.6512	-.7649	-.7082	-.5235	-.3595
.901	-.6256	-.7162	-.7743	-.6876	-.5396	-.3677

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB SPEED BRAKE

(XEBK61)

ALPHA (5) = 11.953 BETA (4) = 4.259 MACH = .59660 O = 594.44 P = 2386.0 RNL = 4.8439

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5728 -.6234 -.6933 -.6463 -.5279 -.3400
.757 -.5638 -.6309 -.7360 -.6786 .0000 -.3264
.805 -.5693 -.6631 -.7517 -.6689 -.4858 -.3339
.887 -.5954 -.6993 -.7612 -.6582 -.4726 -.3149
.953 -.6311 -.7508 -.7769 -.6442 -.4909 -.3128

ALPHA (5) = 11.951 BETA (5) = 8.316 MACH = .59660 O = 594.44 P = 2386.0 RNL = 4.8439

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.5276 -.6742 -.7972 -.6751 -.4569 -.2454
.757 -.6283 -.6979 -.6258 -.6857 .0000 -.2494
.805 -.6316 -.7516 -.6493 -.6618 -.4031 -.2364
.887 -.6648 -.6339 -.6559 -.6141 -.3777 -.2281
.953 -.7530 -.9100 -.6560 -.5579 -.3556 -.2196

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073:0A148) - 140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

SREF =	2650.0000 SC.FT.	X:RP =	1076.6800 IN. X0
LREF =	.474.8500 IN.	Y:RP =	.0000 IN. Y0
BREF =	936.3880 IN.	Z:RP =	.375.0000 IN. Z0
SCALE =	.0360		

$$\text{ALPHA (1)} = -4.059 \quad \text{BETA (1)} = -3.849 \quad \text{MACH} = 1.3925 \quad 0 = 599.99 \quad P = 442.06 \quad RN/L = 2.9210$$

SECTION : 1 RIGHT HAND SIDE

DEPENDENT VARIABLE CP

$$Z:BY .3170 .4120 .5070 .6020 .6970 .7920$$

$$X:CY -.5038 -.5920 -.6047 -.6031 -.5865 -.5501$$

$$.57 -.5916 -.5918 -.6083 -.6052 -.0000 -.5496$$

$$.625 -.5815 -.5241 -.6104 -.6055 -.5830 -.5508$$

$$.667 -.5828 -.5681 -.6135 -.6059 -.5913 -.5453$$

$$.69 -.5844 -.5614 -.6140 -.6050 -.5799 -.5389$$

$$\text{ALPHA (2)} = -2.932 \quad \text{BETA (2)} = .195 \quad \text{MACH} = 1.3925 \quad 0 = 599.99 \quad P = 442.06 \quad RN/L = 2.9210$$

SECTION : 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z:BY .3170 .4120 .5070 .6020 .6970 .7920$$

$$X:CY -.5010 -.5911 -.6025 -.6049 -.5893 -.5521$$

$$.567 -.5816 -.5938 -.6082 -.6065 -.0000 -.5502$$

$$.605 -.5797 -.5929 -.6127 -.6058 -.5843 -.5484$$

$$.697 -.5829 -.6013 -.6159 -.6021 -.5822 -.5394$$

$$.688 -.5822 -.6054 -.6158 -.5983 -.5795 -.5259$$

$$\text{ALPHA (3)} = -2.935 \quad \text{BETA (3)} = .4 .280 \quad \text{MACH} = 1.3925 \quad 0 = 599.99 \quad P = 442.06 \quad RN/L = 2.9210$$

SECTION : 1 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

$$Z:BY .3170 .4120 .5070 .6020 .6970 .7920$$

$$X:CY -.5105 -.5938 -.6130 -.6180 -.5955 -.5497$$

$$.567 -.5831 -.6025 -.6173 -.6201 .0000 -.5495$$

$$.625 -.5842 -.6042 -.6201 -.6197 -.5913 -.5495$$

$$.667 -.5823 -.5124 -.6232 -.5180 -.5849 -.5445$$

$$.659 -.5816 -.6164 -.6238 -.6139 -.5739 -.5229$$

PARAMETRIC DATA

(XEBK62) (13 AUG 75)

DATA : 14 FEB 75

TASULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-07310A14B) - 140A/B/C/R ORB SPEED BRAKE

A. P-A (3) = 3.55B BETA (2) = .187 MACH = 1.3919 Q = 599.88 P = 442.29 RN/L = 2.9189

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .2170 .4120 .5070 .6020 .6970 .7920

X/CY

.736	-.5159	-.6052	-.6169	-.6214	-.6069	-.5707
.757	-.5952	-.6250	-.6226	-.6235	.0000	-.5683
.835	-.5950	-.6075	-.6251	-.6230	-.6024	-.5667
.837	-.5934	-.6160	-.6292	-.6204	-.5998	-.5610
.868	-.6026	-.6219	-.6295	-.6159	-.5982	-.5472

A. P-A (3) = 3.553 BETA (2) = 4.246 MACH = 1.3919 Q = 599.88 P = 442.29 RN/L = 2.9189

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.615	-.6052	-.6191	-.6276	-.6131	-.5724
.627	-.6161	-.6252	-.6295	.0000	-.5701
.635	-.6161	-.6197	-.6283	-.6058	-.5682
.637	-.6161	-.6219	-.6328	-.6262	-.5636
.668	-.6255	-.6279	-.6337	-.6228	-.5491

A. P-A (3) = 3.552 BETA (1) = -3.865 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6120 .6970 .7920

X/CY

.6236	-.6146	-.6267	-.6349	-.6226	-.5850
.651	-.6061	-.6151	-.6321	-.6366	.0000
.666	-.6101	-.6185	-.6352	-.6366	-.5814
.687	-.6111	-.6172	-.6366	-.6129	-.5767
.718	-.6111	-.6151	-.6352	-.6252	-.5670

A. P-A (3) = 3.532 BETA (2) = .179 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.6173	-.6191	-.6239	-.6173	-.6242	-.6120
.657	-.6037	-.6037	-.6233	-.6265	.0000
.665	-.6023	-.6110	-.6244	-.6262	-.5732
.687	-.6018	-.6169	-.6305	-.6239	-.6054
.718	-.6058	-.6224	-.6207	-.6196	-.5535

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.333 BETA (3) = 4.245 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.3122

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.6235 -.6113 -.6194 -.6241 -.6135 -.5778

.757 -.6037 -.5108 -.6234 .0000 -.5773

-.825 -.6543 -.6113 -.6263 -.6284 -.6099 -.5761

-.887 -.6352 -.5177 -.6289 -.6265 -.6073 -.5739

-.953 -.6544 -.6227 -.6295 -.6251 -.6057 -.5632

ALPHA (5) = 11.912 BETA (1) = -3.854 MACH = 1.3916 Q = 599.87 P = 442.53 RN/L = 2.9199

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.6242 -.6154 -.6281 -.6352 -.6260 -.5895

.757 -.6066 -.6171 -.6328 -.6376 .0000 -.5890

-.825 -.6189 -.6204 -.6352 -.6376 -.6210 -.5867

-.887 -.6126 -.6272 -.6356 -.6371 -.6165 -.5801

-.953 -.6164 -.6312 -.6378 -.6378 -.6120 -.5704

ALPHA (5) = 11.921 BETA (2) = -184 MACH = 1.3916 Q = 599.87 P = 442.53 RN/L = 2.9199

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.6235 -.6125 -.6231 -.6283 -.6169 -.5831

.757 -.6054 -.6134 -.6271 -.6306 .0000 -.5826

-.825 -.6255 -.6145 -.6307 -.6320 -.6136 -.5819

-.887 -.6063 -.6241 -.6339 -.6301 -.6115 -.5795

-.953 -.6093 -.6235 -.6346 -.6254 -.6096 -.5724

ALPHA (5) = 11.919 BETA (3) = -4.258 MACH = 1.3916 Q = 599.87 P = 442.53 RN/L = 2.9199

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.6237 -.6161 -.6249 -.6277 -.6197 -.5870

.757 -.6037 -.6159 -.6275 -.6306 .0000 -.5860

-.825 -.6107 -.6175 -.6305 -.6315 -.6164 -.5860

-.887 -.5103 -.6223 -.6334 -.6315 -.6142 -.5818

-.953 -.6104 -.6270 -.6341 -.6301 -.5135 -.5718

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TASULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R SPEED BRAKE

(XEBK62)

ALPHA (6) = .15.912 BETA (1) = -.3.830 MACH = 1.3897 Q = 599.83 P = 443.71 RN/L = 2.9243

SECTION 1 (RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .758 -.6379 -.6293 -.6407 -.6465 -.6362 -.6004
.757 -.6236 -.6311 -.6471 -.6478 -.6478 .0000 -.5997
.665 -.6259 -.6349 -.6414 -.6492 -.6483 -.6265 -.5976
.667 -.6271 -.6414 -.6457 -.6532 -.6457 -.6206 -.5819

A-BPA4 (5) = .15.924 BETA (2) = .18* MACH = 1.3897 Q = 599.83 P = 443.71 RN/L = 2.9243

SECTION 1 (RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .6311 -.6223 -.5320 -.6374 -.6251 -.5929
.757 -.6138 -.6216 -.6379 -.6393 .6300 -.5906
.675 -.6155 -.6254 -.6398 -.6393 -.6213 -.5903
.687 -.6183 -.6218 -.5454 -.6393 -.6193 -.5866
.656 -.6211 -.6277 -.E+26 -.6344 -.6180 -.5783

A-BPA4 (5) = .15.925 BETA (3) = 4.280 MACH = 1.3897 Q = 599.83 P = 443.71 RN/L = 2.9243

SECTION 1 (RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .6329 -.6253 -.6252 -.6257 -.6257 -.5957
.6411 -.6171 -.6252 -.6397 -.6350 -.6231 -.5957
.6412 -.6181 -.6274 -.6274 -.6402 -.6352 .0000 -.5947
.6413 -.6191 -.6301 -.6301 -.6393 -.6362 -.6195 -.5933
.6414 -.6201 -.6319 -.6319 -.6107 -.6373 -.6198 -.5970
.6415 -.6211 -.6329 -.6329 -.6107 -.6373 -.6184 -.5752

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(CA14B) -140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

Z/B	2530.0000	SQ.FT.	XMRP	=	1076.5800	IN. X0
REF	.474.8000	IN.	YMRP	=	.0000	IN. Y0
B/E	936.0580	IN.	ZMRP	=	375.0000	IN. Z0
S-A-E	.0300					

$$\alpha_{\text{PA}}(1) = -4.050 \quad \text{BETA}(1) = -3.840 \quad \text{MACH} = 1.2459 \quad 0 = 600.11 \quad P = 552.28 \quad RN/L = 3.0241$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B 1 .3170 .4120 .5070 .6020 .6970 .7920

1/22	-7326	-7167	-7329	-7348	-7170	-6587
.757	-7033	-7169	-7383	-7393	.0000	.6675
.855	-7023	-7197	-7426	-7393	-.7128	-.6682
.867	-7028	-7278	-7457	-7383	-.7097	-.6656
.963	-7052	-7349	-7478	-7357	-.7054	-.6545

$$\alpha_{\text{PA}}(1) = -3.916 \quad \text{BETA}(2) = .196 \quad \text{MACH} = 1.2459 \quad 0 = 600.11 \quad P = 552.28 \quad RN/L = 3.0241$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B 1 .3170 .4120 .5070 .6020 .6970 .7920

1/22	-7252	-7151	-7336	-7369	-7170	-6651
.757	-6285	-7141	-7409	-7397	.0000	.6642
.895	-6955	-7191	-7447	-7397	-.7075	-.6625
.897	-7047	-7324	-7504	-7359	-.7030	-.6573
.953	-7120	-7414	-7515	-7317	-.6980	-.6447

$$\alpha_{\text{PA}}(1) = -3.923 \quad \text{BETA}(3) = 4.275 \quad \text{MACH} = 1.2459 \quad 0 = 600.11 \quad P = 552.28 \quad RN/L = 3.0241$$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/B 1 .3170 .4120 .5070 .6020 .6970 .7920

1/22	-7454	-7289	-7301	-7507	-7261	-6695
.757	-7234	-7281	-7662	-7543	.0000	-.6700
.855	-7220	-7303	-.7502	-.7555	-.7209	-.6723
.867	-7239	-7391	-.7559	-.7528	-.7078	-.6689
.953	-7303	-.7439	-.6917	-.7533	-.6925	-.6401

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(13 AUG 75)

PARAMETRIC DATA

RUDDER	=	5.000	SPDBRK	=	55.000
BOFLAP	=	16.300	L-ELVN	=	-4.000
R-ELVN	=	-4.000	MACH	=	1.250

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TABULATED PRESSURE DATA - DAI48 (AMES 11-073-1)

AMES 11-073(DAI48) - 140A/B/C/R ORB SPEED BRAKE

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SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP(XEB63)
(XEB63)

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/GV .7258 -.7259 -.7284 -.7490 -.7320 -.6782

.757 -.7113 -.7267 -.7509 -.7538 -.0000 -.6777

.955 -.7113 -.7235 -.7559 -.7547 -.7258 -.6786

.687 -.7113 -.7232 -.7523 -.7531 -.7204 -.6772

.653 -.7113 -.7232 -.7523 -.7531 -.7204 -.6772

.653 -.7165 -.7489 -.7645 -.7476 -.7125 -.6684

A- α H4 1 2 = .50 BETA 1 2 = .180 MACH = 1.2451SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/GV .3170 .4120 .5070 .6020 .6970 .7920

X/GV .7339 -.7223 -.7413 -.7456 -.7255 -.6731

.757 -.7113 -.7239 -.7473 -.7487 -.0000 -.6719

.875 -.7113 -.7232 -.7518 -.7475 -.7181 -.6684

.897 -.7113 -.7232 -.7518 -.7475 -.7181 -.6684

.955 -.7113 -.7232 -.7560 -.7463 -.7120 -.6622

.955 -.7113 -.7232 -.7592 -.7442 -.7056 -.6510

A- α H4 1 2 = .50 BETA 1 2 = .4256 MACH = 1.2451SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/GV .3170 .4120 .5070 .6020 .6970 .7920

X/GV .7287 -.7287 -.7429 -.7551 -.7359 -.6772

.7507 -.7292 -.7511 -.7566 -.7000 -.6767

.7507 -.7292 -.7516 -.7566 -.7269 -.6762

.7507 -.7292 -.7516 -.7566 -.7269 -.6762

.7507 -.7292 -.7516 -.7566 -.7269 -.6762

.7507 -.7292 -.7516 -.7566 -.7269 -.6762

A- α H4 1 2 = .50 BETA 1 2 = .3-3.864 MACH = 1.2446SECTION 1: RIGHT HAND INSIDE
DEPENDENT VARIABLE CP

Z/GV .3170 .4120 .5070 .6020 .6970 .7920

X/GV .7155 -.7155 -.7155 -.7155 -.7155 -.6810

.7552 -.7155 -.7155 -.7155 -.7155 -.6810

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DATE 11-07-67

REGULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(DA148) -140A/B/C/R ORB SPEED BRAKE

(XEB:63)

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

REF ID: A148
TEST NO. = 7 637
TEST DATE = 11-07-67
TEST TIME = 14:44
TEST ALT = 4244
MACH = 1.2457
0 = 599.38
P = 551.80
RNL = 3.2257
DEPENDENT VARIABLE CP
2130 6320 .6970 .7920

11-073-1

TRANSLATED PRESSURE DATA - 04148 (AMES 11-073-1)

AMES 11-073(04148) -140A/B/C/R ORB SPEED BRAKE

REFERENCE DATA

REF. P = 14.74 PSIG (1000 FT.)
X²RP = 1076.6800 IN. X0
Y²RP = .0000 IN. Y0
Z²RP = 375.0000 IN. Z0
M²RP = .0000

BETA = -3.651 BETA (1) = -3.840 MACH = 1.0981 0 = 598.93 P = 709.54 RNU/L = 3.1905

SECTION 1 : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z = 3.750 -> 120 .5070 .5020 .6970 .7920

Z = 3.750 -> 120 .5070 .5020 .6970 .7920

Z = 3.750 -> 120 .5070 .5020 .6970 .7920

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Z = 3.750 -> 120 .5070 .5020 .6970 .7920

Z = 3.750 -> 120 .5070 .5020 .6970 .7920

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(XEBK64) (13 AUG 75)

PARAMETRIC DATA

RUDER = 5.000 SPDBRK = 55.000
BDFLAP = 16.300 L-ELVN = -4.000
R-ELVN = 1.100

LINE 1 - FCG 7F

TRANSLATED PRESSURE DATA - CA148 (AMES 11-073-1)

AMES 11-073(CA148) - 140A/B/C/R ORB SPEED BRAKE
MACH = -3.1509
DEPENDENT VARIABLE CP
Z_Beta = 3.152
Z_Cp = 1.125
Z_Delta = .5070
Z_Psi = .6970
Z_Roll = .7920

Beta = 353 MACH = -3.152
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

Beta = 353 MACH = -3.153
Cp = 1.125
D_L = .5070
Psi = .6970
R_L = .7920

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140B(E4)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (4) = 7.900 BETA (3) = 4.237 MACH = 1.0995 Q = 600.25 P = 709.31 RN/L = 3.1951

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .3 -.7226 -.7271 -.7530 -.7801 -.7585 -.6642

.7 -.7052 -.7271 -.7673 -.7898 -.0000 -.6647

.05 -.5993 -.7244 -.7258 -.7936 -.7374 -.6557

.397 -.7112 -.7101 -.7965 -.7818 -.7336 -.6457

.958 -.7247 -.7693 -.8055 -.7695 -.7269 -.6386

ALPHA (5) = 11.919 BETA (1) = -3.844 MACH = 1.0980 Q = 599.84 P = 710.72 RN/L = 3.1951

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .7913 -.7803 -.8100 -.8247 -.7932 -.7107

.757 -.7664 -.7844 -.8190 -.8314 -.0030 -.7081

.605 -.7659 -.7920 -.8293 -.8328 -.7784 -.7040

.887 -.7779 -.8026 -.8389 -.8273 -.7633 -.6943

.258 -.7922 -.8127 -.8258 -.8259 -.7583 -.6756

ALPHA (5) = 11.930 BETA (2) = .189 MACH = 1.0980 Q = 599.84 P = 710.72 RN/L = 3.1951

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .7593 -.7584 -.7824 -.8147 -.7898 -.6917

.757 -.7623 -.7591 -.7981 -.8263 -.0003 -.6957

.605 -.7356 -.7522 -.8113 -.8301 -.7727 -.6907

.637 -.7453 -.7843 -.8346 -.8246 -.7611 -.6855

.968 -.7608 -.9014 -.8365 -.8277 -.7535 -.6691

ALPHA (5) = 11.925 BETA (3) = 4.249 MACH = 1.0980 Q = 599.84 P = 710.72 RN/L = 3.1951

SECTION : 1:RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .7149 -.7434 -.7621 -.7433 -.6573

.757 -.7307 -.7155 -.7575 -.7717 -.0000 -.6554

.605 -.7314 -.7224 -.7679 -.7740 -.7291 -.6488

.637 -.7356 -.7635 -.7804 -.7721 -.7250 -.6513

.958 -.7177 -.7634 -.7285 -.7681 -.7263 -.6492

DATE : 14 FEB 76

TABULATED PRESSURE DATA - OAI-1B (AMES 11-073-1)

AMES 11-073(OAI148) -1404/B/C/R CRB SPEED BRAKE

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REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1075.6800 IN. XC
LREF =	474.8000 IN.	YMRP =	.0000 IN. YO
BREF =	936.0580 IN.	ZMRP =	375.0000 IN. ZO
SCALE =	.0300		

ALPHA : 1) = -3.955 BETA (1) = -3.837 MACH = .90037 0 = 600.12 P = 1057.6 RN/L = 3.5768

SECTION 1: RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	-5257	-5344	-5870	-6189	-5901	-4808
	-5138	-5327	-6007	-6263	-5500	-4768
	-5214	-5519	-6386	-6393	-5804	-4771
	-5355	-5892	-6530	-6374	-5608	-4586
	-5625	-6282	-6651	-6298	-5464	-4446

ALPHA : 1) = -3.953 BETA (2) = .195 MACH = .90037 0 = 600.12 P = 1057.6 RN/L = 3.5768

SECTION 1: RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5073	.6020	.6970	.7920
X/CY	-4644	-4635	-5077	-5415	-5280	-4365
	-4510	-4633	-5249	-5512	-5000	-4353
	-4595	-4780	-5387	-5583	-5176	-4324
	-4660	-5114	-5504	-5543	-5110	-4240
	-4912	-5130	-5796	-5491	-4987	-4294

ALPHA : 1) = -3.957 BETA (3) = 4.274 MACH = .90037 0 = 600.12 P = 1057.6 RN/L = 3.5768

SECTION 1: RIGHT HAND INSIDE

Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	-4290	-4538	-5001	-5225	-4977	-4016
	-4346	-4505	-5231	-5348	-5000	-3968
	-4486	-4757	-5431	-5400	-4762	-3938
	-4703	-5361	-5591	-5308	-4757	-3983
	-4925	-5413	-5688	-5298	-4658	-3945

ORIGINAL PAGE IS
OF POOR QUALITY

PARAMETRIC DATA

(XEBK65) (13 AUG 75)

PARAMETRIC DATA

RUDDER =	5.000	SIPDBRK =	55.000
BDFLAP =	16.300	L-EVN =	-4.000
R-ELVN =	-4.000	MACH =	.900

DATE : 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R JRB SPEED BRAKE

PAGE E454

ALPHA (2) = .052 BETA (1) = -3.869 MACH = .90007 Q = 599.62 P = 1057.3 RN/L = 3.5759

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5269	-.5586	-.6261	-.6491	-.3129	-.4792
.757	-.5284	-.5443	-.6446	-.6687	.0000	-.4577
.805	-.5378	-.5756	-.6558	-.6741	-.5864	-.4676
.857	-.5686	-.6263	-.7006	-.6673	-.5912	-.4473
.905	-.5895	-.6705	-.7024	-.6502	-.5671	-.4333

ALPHA (2) = .054 BETA (1) = .179 MACH = .90007 Q = 599.62 P = 1057.3 RN/L = 3.5759

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.4562	-.4822	-.5365	-.5557	-.5543	-.4526
.757	-.4514	-.4914	-.5531	-.5803	.0000	-.4523
.805	-.4657	-.5044	-.5661	-.5922	-.5314	-.4519
.857	-.4822	-.5385	-.5881	-.5829	-.5212	-.4386
.905	-.5118	-.5509	-.6080	-.5841	-.5172	-.4348

ALPHA (2) = .050 BETA (3) = 4.252 MACH = .90007 Q = 599.62 P = 1057.3 RN/L = 3.5759

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.4523	-.4874	-.5344	-.5607	-.5271	-.4232
.757	-.4526	-.4848	-.5522	-.5650	.0000	-.4140
.805	-.4636	-.4931	-.5632	-.5766	-.4979	-.4040
.857	-.4740	-.5280	-.5929	-.5745	-.5003	-.4053
.905	-.5152	-.5614	-.6241	-.5639	-.4939	-.3351

ALPHA (3) = 4.021 BETA (1) = -3.873 MACH = .89817 Q = 598.16 P = 1059.3 RN/L = 3.5705

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5313	-.5507	-.6291	-.6453	-.6016	-.4392
.757	-.5313	-.5597	-.6612	-.6659	.0000	-.4319
.805	-.5405	-.5794	-.6927	-.6676	-.5616	-.4115
.857	-.5581	-.6362	-.6910	-.5517	-.5443	-.3993
.905	-.5905	-.6532	-.7036	-.6491	-.5514	-.3718

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

AMES 11-073(0A148) -14DA/B/C/R ORB SPEED BRAKE

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ALPHA = 4.021 BETA (2) = .183 MACH = .89817 0 = 598.16 P = 1059.3 RNL = 3.5705
 SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.4570	-.4824	-.5379	-.5812	-.5539	-.4503
.757	-.4758	-.4995	-.5565	-.5862	-.0000	-.4494
.925	-.4735	-.5080	-.5250	-.5995	-.5327	-.4418
.887	-.4936	-.5250	-.5987	-.5947	-.5287	-.4355
.958	-.5168	-.5747	-.6182	-.5812	-.5199	-.4308

ALPHA (3) = 4.023 BETA (3) = .4.246 MACH = .89817 0 = 598.16 P = 1059.3 RNL = 3.5705

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.709	-.4513	-.4950	-.5546	-.5878	-.5444	-.4152
.757	-.4763	-.5052	-.5769	-.6052	-.0000	-.4038
.855	-.4874	-.5152	-.5971	-.6137	-.5214	-.3965
.287	-.5116	-.5534	-.6220	-.6087	-.5100	-.4010
.969	-.5442	-.6052	-.6527	-.5902	-.4969	-.3859

ALPHA (4) = 7.876 BETA (1) = -3.865 MACH = .89873 0 = 598.61 P = 1058.8 RNL = 3.5706

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.709	-.5445	-.5691	-.6411	-.6565	-.6027	-.4345
.757	-.5423	-.5722	-.6546	-.6821	-.0000	-.4214
.925	-.5516	-.5934	-.6954	-.6821	-.5634	-.4136
.887	-.5684	-.6387	-.7165	-.6655	-.5539	-.3947
.958	-.5878	-.6726	-.7291	-.6606	-.5411	-.3883

ALPHA (4) = 7.884 BETA (2) = .183 MACH = .89873 0 = 598.61 P = 1058.8 RNL = 3.5706

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.4700	-.4991	-.5503	-.5786	-.5651	-.4398
.757	-.4771	-.5072	-.5729	-.6037	-.0000	-.4509
.905	-.4895	-.5212	-.5856	-.6144	-.5404	-.4467
.887	-.5053	-.5539	-.6213	-.6120	-.5271	-.4295
.958	-.5330	-.5849	-.6298	-.6021	-.5252	-.4100

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE
(XEBK65)

SECTION : 11.01.001 = 7.882 BETA (3) = 4.244 MACH = .89873 Q = 598.61 P = 1058.8 RN/L = 3.5706
DEPENDENT VARIABLE CP

X/CY

.708	-.481	-.5163	-.5854	-.6184	-.5614	-.4079
.751	-.4285	-.5227	-.6049	-.6360	-.6000	-.4079
.815	-.5047	-.5422	-.6382	-.6439	-.5412	-.4000
.887	-.5229	-.5552	-.6769	-.6295	-.5329	-.3823
.959	-.5636	-.6308	-.6790	-.6180	-.5117	-.3757

SECTION : 11.01.001 = 7.882 BETA (1) = -3.854 MACH = .89780 Q = 598.05 P = 1060.0 RN/L = 3.5707

DEPENDENT VARIABLE CP

X/CY

.708	-.6138	-.5383	-.5694	-.6621	-.5874	-.4377
.751	-.6629	-.6532	-.6920	-.6742	-.6000	-.4130
.815	-.6863	-.6846	-.7040	-.6839	-.5604	-.4154
.887	-.6915	-.6951	-.7128	-.6597	-.5427	-.3927
.959	-.6919	-.6981	-.7277	-.6576	-.5249	-.3832

SECTION : 11.01.001 = 7.882 BETA (2) = .190 MACH = .89780 Q = 598.05 P = 1060.0 RN/L = 3.5707

DEPENDENT VARIABLE CP

X/CY

.708	-.5720	-.4120	-.5079	-.6020	-.6970	.7920
.751	-.6035	-.5133	-.6020	-.6537	-.5927	-.4454
.815	-.6362	-.5636	-.6349	-.6495	-.6000	-.4297
.887	-.6563	-.6023	-.6762	-.6561	-.5635	-.4378
.959	-.6610	-.6163	-.6812	-.6619	-.5556	-.4349

SECTION : 11.01.001 = 7.882 BETA (3) = 4.253 MACH = .89780 Q = 598.05 P = 1060.0 RN/L = 3.5707

DEPENDENT VARIABLE CP

X/CY

.708	-.6138	-.5383	-.5694	-.6621	-.5874	-.4377
.751	-.6629	-.6532	-.6920	-.6742	-.6000	-.4130
.815	-.6863	-.6846	-.7040	-.6839	-.5604	-.4154
.887	-.6915	-.6951	-.7128	-.6597	-.5427	-.3927
.959	-.6919	-.6981	-.7277	-.6576	-.5249	-.3832

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE E-58

AMES 11-073(0A14B) - 14CA/B/C/R ORB SPEED BRAKE

ALPHA (1) = -3.932 BETA (4) = 4.271 MACH = .59482 Q = 591.26 P = 2387.4 RN/L = 4.9005

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.703 -.5661 -.5622 -.6403 -.6148 -.5343 -.3566

.757 -.5198 -.5757 -.6707 -.5345 -.0000 -.3558

.815 -.5442 -.5358 -.6312 -.6343 -.4259 -.3606

.867 -.5818 -.5553 -.7059 -.6107 -.4788 -.3416

.929 -.6215 -.7213 -.759 -.6053 -.4654 -.3251

ALPHA (1) = -3.917 BETA (4) = 8.333 MACH = .59482 Q = 591.26 P = 2387.4 RN/L = 4.9005

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.629 -.6749 -.7574 -.5724 -.5172 -.3222

.681 -.6977 -.6944 -.5991 -.5653 -.2958

.736 -.7141 -.6941 -.6972 -.6757 -.3168

.790 -.7622 -.6255 -.6953 -.6563 -.3059

.843 -.833 -.6255 -.6354 -.6259 -.2655

.896 BETA (4) = -7.866 MACH = .59550 Q = 592.43 P = 2386.4 RN/L = 4.8075

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.629 -.6862 -.7563 -.5645 -.5459

.681 -.6979 -.7802 -.5035 -.3355

.736 -.7141 -.6962 -.5813 -.5149

.790 -.7622 -.6255 -.4935 -.2223

.843 -.833 -.6255 -.6259 -.6259

.896 BETA (4) = -7.852 MACH = .59550 Q = 592.43 P = 2385.4 RN/L = 4.8075

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.629 -.6862 -.7563 -.5645 -.5459

.681 -.6979 -.7802 -.5035 -.3355

.736 -.7141 -.6962 -.5813 -.5149

.790 -.7622 -.6255 -.4935 -.2223

.843 -.833 -.6255 -.6259 -.6259

.896 BETA (4) = -7.852 MACH = .59550 Q = 592.43 P = 2385.4 RN/L = 4.8075

CATS 14 558 76

14234-LATED PRESSURE DATA = 00148 (AMES 11-073-1)

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AVANT 11-0723/001102 - 11100/B/C/B BRAKE SPEED BRAKE

1000

SECTION (1) = 7.853 BETA (1) = -7.638 MACH = .59424 Q = 590.06 P = 2387.2 RNL = 4.7971						
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	.728	-.6899	-.7527	-.8037	-.8470	-.8369
	.757	-.6656	-.7482	-.8210	-.6626	-.0000
	.615	-.6597	-.8070	-.8191	-.6454	-.4371
	.637	-.6357	-.8180	-.8214	-.6575	-.4307
	.568	-.7459	-.6575	-.8285	-.6449	-.4092
ALPHA (4) = 7.995 BETA (2) = -3.859 MACH = .59424 Q = 590.06 P = 2387.2 RNL = 4.7971						
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	.728	-.5869	-.6274	-.5973	-.6200	-.4884
	.757	-.5546	-.6371	-.7241	-.6391	-.0000
	.835	-.5712	-.6532	-.7384	-.6336	-.4542
	.697	-.5936	-.7412	-.7530	-.6223	-.4008
	.668	-.6376	-.7568	-.7672	-.6126	-.2899
ALPHA (4) = 7.991 BETA (3) = .178 MACH = .59424 Q = 590.06 P = 2387.2 RNL = 4.7971						
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	.728	-.5669	-.6099	-.7109	-.5829	-.5691
	.757	-.5771	-.6315	-.7387	-.7042	-.0000
	.825	-.5833	-.6733	-.7710	-.6975	-.5341
	.687	-.6194	-.7050	-.7768	-.6956	-.5196
	.669	-.6393	-.7542	-.7830	-.6872	-.5150
ALPHA (4) = 7.992 BETA (4) = 4.237 MACH = .59424 Q = 590.06 P = 2387.2 RNL = 4.7971						
SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY	.728	-.5822	-.6432	-.7511	-.6562	-.4894
	.757	-.5939	-.6548	-.8070	-.6811	-.0000
	.805	-.6022	-.7127	-.9067	-.6887	-.4365
	.687	-.6497	-.8343	-.9393	-.6423	-.4119
	.669	-.7098	-.8472	-.9317	-.6012	-.2519

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ABOLUTED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R 008 SPEED BRAKE

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ALPHA (4) = 7.989 BETA (5) = 8.293 MACH = .59424 0 = 590.06 P = 2387.2 RNL = 4.7371
SECTION : LEFT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C /

.758 -.6201 -.6957 -.8179 -.6568 -.4127 -.2425
.757 -.6201 -.7089 -.8440 -.6630 .0000 -.2356
.855 -.6182 -.7899 -.8582 -.6596 -.3699 -.2397
.857 -.7155 -.8717 -.8603 -.5838 -.3521 -.2359
.953 -.7182 -.9318 -.8188 -.5081 -.3072 -.2352

ALPHA (5) = 12.002 BETA (1) = -7.846 MACH = .59422 0 = 590.06 P = 2387.2 RNL = 4.7378
SECTION : LEFT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C /

.758 -.8291 -.7251 -.7937 -.6608 -.4842 -.3114
.757 -.6545 -.7475 -.7921 -.6559 .0000 -.2971
.855 -.6591 -.7781 -.8266 -.5533 -.4670 -.2995
.857 -.6592 -.8356 -.8237 -.6658 -.4553 -.3124
.953 -.7385 -.8356 -.8356 -.5592 -.5739 -.5019 -.3157

ALPHA (5) = 12.024 BETA (2) = -3.839 MACH = .59422 0 = 590.06 P = 2387.2 RNL = 4.7378
SECTION : LEFT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C /

.758 -.5837 -.5276 -.7118 -.6752 -.5176 -.2951
.757 -.6732 -.6416 -.7447 -.6245 -.4903 -.3330
.855 -.6595 -.6382 -.7582 -.6709 -.620 -.3056
.857 -.6594 -.7339 -.7152 -.6457 -.4666 -.3059
.953 -.742 -.7152 -.7152 -.6457 -.4666 -.3059

ALPHA (5) = 12.024 BETA (3) = -1.165 MACH = .59422 0 = 590.06 P = 2387.2 RNL = 4.7379
SECTION : LEFT HAND INSIDE
DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/C /

.758 -.5287 -.5287 -.7676 -.7035 -.5768 -.3625
.757 -.6658 -.6137 -.7558 -.7239 .0000 -.3565
.855 -.6234 -.5925 -.8032 -.7116 -.5316 -.3465
.857 -.6238 -.611 -.6295 -.6227 -.5081 -.3295
.953 -.6335 -.6146 -.6156 -.6803 -.5019 -.3224

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TRANSLATED PRESSURE DATA - DATA 1 AT&S 11-073-1

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AT&S 11-073(0A148) - 140A/B/C/R ORB SPEED BRAKE (XEBX66)						
SECTION 1	SIGHT HEIGHT	ANGLE OF SIDE	DEPENDENT VARIABLE CP	P	RNL	4.7978
Z/E:	.3170	.4129	.5970	.6020	.6970	.7920
Z/CY						
.757	-.5676	-.6292	-.7322	-.6683	-.5105	-.3024
.805	-.5774	-.6113	-.7542	-.5975	.0000	-.2969
.857	-.5316	-.6363	-.7676	-.6812	-.4765	-.2799
.897	-.6395	-.7239	-.7895	-.6521	-.4347	-.2801
.939	-.6553	-.6255	-.8008	-.6205	-.4237	-.2727
Z/E:	.11373	.87415	.51	.8307	MACH	= .59422
Z/CY						
SECTION 1	SIGHT HEIGHT	ANGLE OF SIDE	DEPENDENT VARIABLE CP	P	RNL	4.7978
Z/E:	.3170	.4129	.5970	.6020	.6970	.7920
Z/CY						
.757	-.6371	-.7120	-.871	-.7086	-.4713	-.2691
.805	-.6350	-.7194	-.8672	-.7203	.0000	-.2446
.857	-.6351	-.7326	-.8893	-.6957	-.4128	-.2379
.897	-.7148	-.8357	-.9096	-.6402	-.3781	-.2323
.939	-.6128	-.6432	-.9527	-.5645	-.3518	-.2254

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TABULATED PRESSURE DATA - GAI4B (AMES 11-073-1)

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AMES 11-073(GAI4B) - 140A/B/C/R SPEED BRAKE

REFERENCE DATA

SECTION	REF. NO.	CROSS SD.FT.	X.CP	Y.CP	Z.CP	IN. X0	IN. Y0	IN. Z0	PARAMETRIC DATA		
									RUDER = .000	SPARK = 55.000	L-ELVN = -.000
1	1.17	-2.954	BETA (1) = -3.849	MACH = .90057	0	= 600.66	P = 1058.0	RNL = 3.6340	R-ELVN = -.900	MACH = -.900	
2	3.2	.31120	.4120	.5070	.6020	.5970	.7920				
3	3.3	.44218	.44745	.5065	.5552	.5181	.4357				
4	3.4	.44218	.44745	.5353	.5525	.5020	.4207				
5	3.5	.44218	.44745	.5353	.5525	.5020	.4207				
6	3.6	.44218	.44745	.5684	.5630	.5117	.4244				
7	3.7	.44218	.44745	.5684	.5630	.5117	.4244				
8	3.8	.44218	.44745	.5684	.5630	.5117	.4244				
9	3.9	.44218	.44745	.5684	.5630	.5117	.4244				
10	4.0	.44218	.44745	.5684	.5630	.5117	.4244				
11	4.1	.44218	.44745	.5684	.5630	.5117	.4244				
12	4.2	.44218	.44745	.5684	.5630	.5117	.4244				
13	4.3	.44218	.44745	.5684	.5630	.5117	.4244				
14	4.4	.44218	.44745	.5684	.5630	.5117	.4244				
15	4.5	.44218	.44745	.5684	.5630	.5117	.4244				
16	4.6	.44218	.44745	.5684	.5630	.5117	.4244				
17	4.7	.44218	.44745	.5684	.5630	.5117	.4244				
18	4.8	.44218	.44745	.5684	.5630	.5117	.4244				
19	4.9	.44218	.44745	.5684	.5630	.5117	.4244				
20	5.0	.44218	.44745	.5684	.5630	.5117	.4244				
21	5.1	.44218	.44745	.5684	.5630	.5117	.4244				
22	5.2	.44218	.44745	.5684	.5630	.5117	.4244				
23	5.3	.44218	.44745	.5684	.5630	.5117	.4244				
24	5.4	.44218	.44745	.5684	.5630	.5117	.4244				
25	5.5	.44218	.44745	.5684	.5630	.5117	.4244				
26	5.6	.44218	.44745	.5684	.5630	.5117	.4244				
27	5.7	.44218	.44745	.5684	.5630	.5117	.4244				
28	5.8	.44218	.44745	.5684	.5630	.5117	.4244				
29	5.9	.44218	.44745	.5684	.5630	.5117	.4244				
30	6.0	.44218	.44745	.5684	.5630	.5117	.4244				
31	6.1	.44218	.44745	.5684	.5630	.5117	.4244				
32	6.2	.44218	.44745	.5684	.5630	.5117	.4244				
33	6.3	.44218	.44745	.5684	.5630	.5117	.4244				
34	6.4	.44218	.44745	.5684	.5630	.5117	.4244				
35	6.5	.44218	.44745	.5684	.5630	.5117	.4244				
36	6.6	.44218	.44745	.5684	.5630	.5117	.4244				
37	6.7	.44218	.44745	.5684	.5630	.5117	.4244				
38	6.8	.44218	.44745	.5684	.5630	.5117	.4244				
39	6.9	.44218	.44745	.5684	.5630	.5117	.4244				
40	7.0	.44218	.44745	.5684	.5630	.5117	.4244				
41	7.1	.44218	.44745	.5684	.5630	.5117	.4244				
42	7.2	.44218	.44745	.5684	.5630	.5117	.4244				
43	7.3	.44218	.44745	.5684	.5630	.5117	.4244				
44	7.4	.44218	.44745	.5684	.5630	.5117	.4244				
45	7.5	.44218	.44745	.5684	.5630	.5117	.4244				
46	7.6	.44218	.44745	.5684	.5630	.5117	.4244				
47	7.7	.44218	.44745	.5684	.5630	.5117	.4244				
48	7.8	.44218	.44745	.5684	.5630	.5117	.4244				
49	7.9	.44218	.44745	.5684	.5630	.5117	.4244				
50	8.0	.44218	.44745	.5684	.5630	.5117	.4244				
51	8.1	.44218	.44745	.5684	.5630	.5117	.4244				
52	8.2	.44218	.44745	.5684	.5630	.5117	.4244				
53	8.3	.44218	.44745	.5684	.5630	.5117	.4244				
54	8.4	.44218	.44745	.5684	.5630	.5117	.4244				
55	8.5	.44218	.44745	.5684	.5630	.5117	.4244				
56	8.6	.44218	.44745	.5684	.5630	.5117	.4244				
57	8.7	.44218	.44745	.5684	.5630	.5117	.4244				
58	8.8	.44218	.44745	.5684	.5630	.5117	.4244				
59	8.9	.44218	.44745	.5684	.5630	.5117	.4244				
60	9.0	.44218	.44745	.5684	.5630	.5117	.4244				
61	9.1	.44218	.44745	.5684	.5630	.5117	.4244				
62	9.2	.44218	.44745	.5684	.5630	.5117	.4244				
63	9.3	.44218	.44745	.5684	.5630	.5117	.4244				
64	9.4	.44218	.44745	.5684	.5630	.5117	.4244				
65	9.5	.44218	.44745	.5684	.5630	.5117	.4244				
66	9.6	.44218	.44745	.5684	.5630	.5117	.4244				
67	9.7	.44218	.44745	.5684	.5630	.5117	.4244				
68	9.8	.44218	.44745	.5684	.5630	.5117	.4244				
69	9.9	.44218	.44745	.5684	.5630	.5117	.4244				
70	10.0	.44218	.44745	.5684	.5630	.5117	.4244				
71	10.1	.44218	.44745	.5684	.5630	.5117	.4244				
72	10.2	.44218	.44745	.5684	.5630	.5117	.4244				
73	10.3	.44218	.44745	.5684	.5630	.5117	.4244				
74	10.4	.44218	.44745	.5684	.5630	.5117	.4244				
75	10.5	.44218	.44745	.5684	.5630	.5117	.4244				
76	10.6	.44218	.44745	.5684	.5630	.5117	.4244				
77	10.7	.44218	.44745	.5684	.5630	.5117	.4244				
78	10.8	.44218	.44745	.5684	.5630	.5117	.4244				
79	10.9	.44218	.44745	.5684	.5630	.5117	.4244				
80	11.0	.44218	.44745	.5684	.5630	.5117	.4244				
81	11.1	.44218	.44745	.5684	.5630	.5117	.4244				
82	11.2	.44218	.44745	.5684	.5630	.5117	.4244				
83	11.3	.44218	.44745	.5684	.5630	.5117	.4244				
84	11.4	.44218	.44745	.5684	.5630	.5117	.4244				
85	11.5	.44218	.44745	.5684	.5630	.5117	.4244				
86	11.6	.44218	.44745	.5684	.5630	.5117	.4244				
87	11.7	.44218	.44745	.5684	.5630	.5117	.4244				
88	11.8	.44218	.44745	.5684	.5630	.5117	.4244				
89	11.9	.44218	.44745	.5684	.5630	.5117	.4244				
90	12.0	.44218	.44745	.5684	.5630	.5117	.4244				
91	12.1	.44218	.44745	.5684	.5630	.5117	.4244				
92	12.2	.44218	.44745	.5684	.5630	.5117	.4244				
93	12.3	.44218	.44745	.5684	.5630	.5117	.4244				
94	12.4	.44218	.44745	.5684	.5630	.5117	.4244				
95	12.5	.44218	.44745	.5684	.5630	.5117	.4244				
96	12.6	.44218	.44745	.5684	.5630	.5117	.4244				
97	12.7	.44218	.44745	.5684	.5630	.5117	.4244				
98	12.8	.44218	.44745	.5684	.5630	.5117	.4244				
99	12.9	.44218	.44745	.5684	.5630	.5117	.4244				
100	13.0	.44218	.44745	.5684	.5630	.5117	.4244				
101	13.1	.44218	.44745	.5684	.5630	.5117	.4244				
102	13.2	.44218	.44745	.5684	.5630	.5117	.4244				
103	13.3	.44218	.44745	.5684	.5630	.5117	.4244				
104	13.4	.44218	.44745	.5684	.5630	.5117	.4244				
105	13.5	.44218	.44745	.5684	.5630	.5117	.4244				
106	13.6	.44218	.44745	.5684	.5630	.5117	.4244				
107	13.7	.44218	.44745	.5684	.5630	.5117	.4244				
108	13.8	.44218	.44745	.5684	.5630	.5117	.4244				

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XEBK671)

$$\Delta \text{PMA} (3) = 4.018 \quad \text{SETA} (2) = .181 \quad \text{MACH} = .89987 \quad 0 = 599.87 \quad P = 1058.3 \quad \text{RNL} = 3.6007$$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3173 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.4168	-.4443	-.4966	-.5345	-.5018	-.4118
.757	-.4315	-.4475	-.5236	-.5425	-.0000	-.4097
.805	-.4505	-.4722	-.5429	-.5615	-.5077	-.4127
.853	-.4705	-.4932	-.5572	-.5522	-.4914	-.4121
.901	-.4855	-.5002	-.5742	-.5491	-.4857	-.3962

$$\Delta \text{PMA} (3) = 4.022 \quad \text{SETA} (2) = 4.243 \quad \text{MACH} = .89987 \quad 0 = 599.87 \quad P = 1058.3 \quad \text{RNL} = 3.6007$$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3173 .4120 .5070 .6020 .6970 .7920

X/CV

.753	-.4643	-.5048	-.5534	-.5918	-.5515	-.4237
.767	-.4726	-.5073	-.5942	-.6185	-.0000	-.4216
.805	-.4965	-.5215	-.6221	-.6116	-.5411	-.4208
.837	-.5355	-.5693	-.6339	-.6112	-.5222	-.4110
.868	-.5579	-.6264	-.6502	-.6345	-.5051	-.3975

$$\Delta \text{PMA} (4) = 7.985 \quad \text{SETA} (1) = -3.860 \quad \text{MACH} = .90040 \quad 0 = 600.32 \quad P = 1057.8 \quad \text{RNL} = 3.5837$$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3173 .4120 .5070 .6020 .6970 .7920

X/CV

.759	-.4870	-.5227	-.5913	-.6308	-.5726	-.4395
.767	-.4892	-.5159	-.6189	-.6442	-.0000	-.4182
.805	-.5021	-.5247	-.6414	-.6320	-.5570	-.4213
.837	-.5339	-.5621	-.6508	-.6315	-.5369	-.4041
.868	-.5702	-.6145	-.6778	-.6334	-.5307	-.3916

$$\Delta \text{PMA} (4) = 7.993 \quad \text{SETA} (2) = .182 \quad \text{MACH} = .90040 \quad 0 = 600.32 \quad P = 1057.8 \quad \text{RNL} = 3.5837$$

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/SV .3173 .4120 .5070 .6020 .6970 .7920

X/CV

.758	-.4299	-.4622	-.5211	-.5608	-.5161	-.4127
.757	-.4481	-.4762	-.5121	-.5679	-.0000	-.4124
.795	-.4594	-.4832	-.5636	-.5719	-.5131	-.4032
.825	-.4806	-.5125	-.6010	-.5716	-.4356	-.4013
.858	-.5090	-.5556	-.6075	-.5581	-.4856	-.3845

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB SPEED BRAKE

ALPHA (4) = 7.992 BETA (3) = 4.242 MACH = .90040 0 = 600.32 P = 1057.8 RNL = 3.5837

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.758	-.850	-.5202	-.5747	-.6092	-.5706	-.4293
.757	-.5031	-.5331	-.5992	-.6250	-.0000	-.4317
.805	-.5036	-.5556	-.6356	-.6335	-.5449	-.4326
.887	-.5391	-.5972	-.5614	-.6356	-.5383	-.4142
.968	-.5823	-.6320	-.6720	-.6292	-.5125	-.3988

ALPHA (5) = 11.953 BETA (1) = -3.856 MACH = .89987 0 = 599.87 P = 1058.3 RNL = 3.5762

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.758	-.5220	-.5514	-.6280	-.6460	-.5830	-.4531
.757	-.5225	-.5630	-.6610	-.6655	-.0000	-.4479
.805	-.5377	-.5927	-.6659	-.6514	-.5745	-.4313
.887	-.5637	-.6220	-.6577	-.6546	-.5588	-.4230
.968	-.6313	-.6655	-.6887	-.6370	-.5491	-.4047

ALPHA (5) = 11.953 BETA (2) = .169 MACH = .89987 0 = 599.87 P = 1058.3 RNL = 3.5762

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.4723	-.5085	-.5584	-.5977	-.5463	-.4419
.757	-.4829	-.5036	-.5766	-.6093	-.0000	-.4280
.805	-.5221	-.5219	-.6145	-.6155	-.5416	-.4223
.887	-.5225	-.5783	-.6405	-.6133	-.5286	-.4080
.968	-.5505	-.6131	-.6685	-.5931	-.5165	-.3921

ALPHA (5) = 11.953 BETA (3) = 4.261 MACH = .89987 0 = 599.87 P = 1058.3 RNL = 3.5762

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.5066	-.5486	-.6077	-.6318	-.5770	-.4412
.757	-.5238	-.5515	-.6449	-.6441	-.0000	-.4303
.805	-.5361	-.5554	-.6571	-.6482	-.5573	-.4135
.887	-.5620	-.6314	-.6955	-.6423	-.5429	-.4199
.968	-.6023	-.6248	-.7054	-.6389	-.5190	-.4144

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB SPEED BRAKE

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(XEBK68) (13 AUG 75)

REFERENCE DATA

SREF =	2000.000	SQ.FT.	XMRP =	1076.6800	IN. X0
LDEF =	.474.833	IN.	YMRP =	.0000	IN. Y0
ESEF =	.935.0580	IN.	ZMRP =	.375.0000	IN. Z0
SCALE =	.5302				

ALPHA (1) = -3.934 BETA (1) = -7.845 MACH = .59574

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

A/CY	-528	-528	-528	-528	-528	-528
.757	-6175	-6175	-6175	-6175	-6175	-6175
.865	-6575	-6575	-6575	-6575	-6575	-6575
.987	-6454	-6454	-6454	-6454	-6454	-6454
.368	-5771	-5771	-5771	-5771	-5771	-5771

- DPL (1) = -3.938 BETA (2) = -3.844 MACH = .59574

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

A/CY	-528	-528	-528	-528	-528	-528
.157	-15242	-15242	-15242	-15242	-15242	-15242
.355	-16387	-16387	-16387	-16387	-16387	-16387
.237	-15692	-15692	-15692	-15692	-15692	-15692
.323	-16237	-16237	-16237	-16237	-16237	-16237

ALPHA (1) = -3.925 BETA (3) = .193 MACH = .59574

SECTION (1) LEFT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

A/CY	-528	-528	-528	-528	-528	-528
.57	-15250	-15250	-15250	-15250	-15250	-15250
.155	-15212	-15212	-15212	-15212	-15212	-15212
.737	-15248	-15248	-15248	-15248	-15248	-15248
.552	-15384	-15384	-15384	-15384	-15384	-15384

- DPL (1) = -3.925 BETA (3) = .193 MACH = .59574

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

RUDER = .0000 SPDBRK = 55.000

BLDFLAP = 22.5000 L-ELVN = -4.0000

R-ELVN = .6000 MACH = .6000

RN/L = 4.8347

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB SPEED BRAKE

(XEBK68)

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5123	-.5550	-.6548	-.6092	-.5181	-.3617
.757	-.5293	-.5824	-.6594	-.6365	-.0003	-.3572
.805	-.5517	-.6171	-.6912	-.6327	-.4891	-.3534
.857	-.5330	-.6725	-.7098	-.6111	-.4668	-.3241
.958	-.6357	-.7116	-.7045	-.5990	-.4504	-.3237

ALPHA (1) = -3.916 BETA (5) = 8.339 MACH = .59574

P = 593.04

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.5361	-.6615	-.7409	-.6813	-.5182	-.3588
.757	-.6066	-.6506	-.7764	-.6841	-.0000	-.3393
.825	-.6295	-.7120	-.7915	-.6848	-.5033	-.3431
.887	-.6726	-.7944	-.8120	-.6682	-.4819	-.3324
.958	-.7393	-.8222	-.7950	-.6249	-.4339	-.3089

ALPHA (2) = -.067 BETA (1) = -7.888 MACH = .59556

P = 592.68

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.7044	-.7641	-.8986	-.7760	-.5720	-.3156
.757	-.7099	-.7770	-.9180	-.8093	-.0000	-.3197
.825	-.7245	-.8239	-.9137	-.7899	-.1227	-.3023
.887	-.7533	-.8735	-.9432	-.7693	-.4753	-.2860
.958	-.7392	-.9192	-.9522	-.7212	-.4477	-.2735

ALPHA (2) = .076 BETA (2) = -3.860 MACH = .59556

P = 592.68

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4121 .5070 .6020 .6970 .7920

X/CY

.708	-.5377	-.6097	-.6910	-.6434	-.5372	-.3351
.757	-.5622	-.6101	-.7423	-.6717	-.0000	-.3319
.805	-.5747	-.6563	-.7469	-.6594	-.5103	-.3227
.867	-.6344	-.7288	-.7521	-.6598	-.4913	-.3167
.958	-.6731	-.7643	-.7547	-.6354	-.4706	-.3258

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-07310A1481 - 140A/B/C/R ORB SPEED BRAKE (XE8K681)						
SECTION 1: UPIGHT HAD:O INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.702	-.5585	-.6197	-.7376	-.6452	-.4979	-.2984
.757	-.5606	-.6058	-.7350	-.6680	.0000	-.2889
.805	-.5551	-.6714	-.7637	-.6564	-.4709	-.295
.897	-.6126	-.7514	-.7838	-.6441	-.4317	-.25
.958	-.6551	-.7795	-.7747	-.6137	-.4220	-.26
Δ_{P4A} (3) = 4.023 $\text{SETA } 1 \ 3) = .182$						
SECTION 1: UPIGHT HAD:O INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.702	-.5328	-.5820	-.6839	-.6398	-.5403	-.3587
.757	-.5333	-.5933	-.7098	-.6547	.0000	-.3549
.805	-.5357	-.6229	-.7351	-.6571	-.5109	-.3428
.897	-.6037	-.6657	-.7483	-.6379	-.4928	-.3256
.958	-.6528	-.7542	-.7461	-.6267	-.4698	-.3141
Δ_{P4A} (3) = 4.027 $\text{SETA } 1 \ 4) = .4.243$						
SECTION 1: UPIGHT HAD:O INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.702	-.5612	-.6350	-.7447	-.6552	-.4583	-.2628
.757	-.5826	-.6689	-.7566	-.6766	.0000	-.2765
.805	-.5870	-.7057	-.7829	-.6391	-.4331	-.2635
.897	-.6555	-.7917	-.9119	-.5244	-.3919	-.2485
.958	-.7352	-.8515	-.7740	-.5734	-.3658	-.2181
Δ_{P4A} (3) = 4.033 $\text{SETA } 1 \ 5) = .8.290$						
SECTION 1: UPIGHT HAD:O INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.702	-.6267	-.7620	-.9195	-.7494	-.5030	-.2655
.757	-.7055	-.7662	-.9251	-.7752	.0000	-.2647
.805	-.7248	-.8927	-.9551	-.7452	-.4650	-.2573
.897	-.8243	-.9344	-.9544	-.6828	-.4114	-.2340
.958	-.8651	-.9381	-.8349	-.6326	-.3793	-.2389

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-07310A14B) - 140A/B/C/R ORB SPEED BRAKE							(XE8K6B)				
ALPHA (deg)	7.992	BETA (deg)	-7.630	MACH	.59642	0	= .594.33	P	= 2386.8	RNL	= 4.8439
SECTION: 1) RIGHT HAND INSIDE											
DEPENDENT VARIABLE CP											
Z/B/	.3170	.4120	.5070	.6020	.5970	.7920					
X/CY											
.729	-.6450	-.7134	-.6218	-.7025	-.4857	-.2677					
.757	-.6444	-.7159	-.8216	-.7108	-.0000	-.2618					
.605	-.5521	-.7748	-.8375	-.6972	-.4493	-.2535					
.697	-.6916	-.6491	-.8695	-.6685	-.4134	-.2570					
.563	-.7444	-.8547	-.8695	-.6623	-.3937	-.2591					
ALPHA = 41 = 7.993 BETA = 2 = -3.860 MACH = .59642				0	= .594.33	P	= 2386.8	RNL	= 4.8439		
SECTION: 1) RIGHT HAND INSIDE											
Z/B/	.3170	.4120	.5070	.6020	.6970	.7920					
X/CY											
.729	-.6474	-.6367	-.7072	-.6395	-.4864	-.2973					
.757	-.6360	-.6327	-.7287	-.5555	-.0000	-.2890					
.616	-.6363	-.6364	-.7522	-.6345	-.4611	-.2855					
.687	-.6366	-.6365	-.7533	-.6256	-.4310	-.2823					
.563	-.6363	-.6363	-.7629	-.6111	-.4483	-.2695					
ALPHA = 41 = 7.991 BETA = 3 = -.85 MACH = .59642				0	= .594.33	P	= 2386.8	RNL	= 4.8439		
SECTION: 1) RIGHT HAND INSIDE											
Z/B/	.3170	.4120	.5070	.6020	.5970	.7920					
X/CY											
.729	-.6251	-.6371	-.6717	-.6557	-.5375	-.3585					
.757	-.6353	-.6339	-.7317	-.6630	-.0000	-.2463					
.616	-.6352	-.6320	-.7247	-.6577	-.5029	-.3503					
.687	-.6350	-.6327	-.7371	-.6502	-.4909	-.3335					
.563	-.6357	-.6325	-.7455	-.6739	-.4633	-.3238					
ALPHA = 41 = 7.992 BETA = 4 = -.234 MACH = .59642				0	= .594.33	P	= 2386.8	RNL	= 4.8439		
SECTION: 1) RIGHT HAND INSIDE											
Z/B/	.3170	.4120	.5070	.6020	.6970	.7920					
X/CY											
.729	-.6472	-.6276	-.7805	-.6773	-.4868	-.2781					
.757	-.6354	-.6172	-.7770	-.6753	-.0000	-.2757					
.616	-.6361	-.6377	-.7572	-.6394	-.4509	-.2634					
.687	-.6362	-.6354	-.7655	-.6321	-.4167	-.2738					
.563	-.6351	-.6355	-.7813	-.6520	-.4004	-.2426					

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES :1-073(OA148) -1140A/B/C/R ORB SPEED BRAKE

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ALPHA (4) = 7.930		BETA (5) = 8.288	MACH = .59642	0 = 594.33	P = 2386.8	RNL = 4.8439
SECTION : 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				11208458:
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.758	-.6298	-.7157	-.8228	-.6882	-.4537	-.2758
.757	-.6529	-.7482	-.8502	-.7058	.0000	-.2614
.905	-.6591	-.8145	-.8718	-.6902	-.4383	-.2566
.697	-.7530	-.9036	-.8735	-.6358	-.3612	-.2616
.953	-.6349	-.9341	-.6356	-.5924	-.3591	-.2426
ALPHA (5) = 11.959	BETA (1) =	-7.852	MACH = .59656	0 = 594.57	P = 2386.7	RNL = 4.8403
SECTION : 1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.759	-.6523	-.7235	-.8113	-.7022	-.4913	-.2828
.757	-.6265	-.7179	-.834	-.7072	.0000	-.2774
.905	-.6139	-.7777	-.8122	-.6757	-.4453	-.2669
.697	-.6791	-.8331	-.8527	-.6750	-.4387	-.2533
.953	-.7452	-.8725	-.8625	-.6693	-.4358	-.2591
ALPHA (5) = 11.978	SETA (2) = -3.840	MACH = .59656	0 = 594.57	P = 2386.7	RNL = 4.8403	
SECTION : 1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.759	-.5289	-.6047	-.7006	-.6402	-.5066	-.3240
.757	-.5410	-.6540	-.7195	-.6700	.0000	-.3218
.905	-.5579	-.6157	-.7435	-.6580	-.4846	-.3199
.697	-.5943	-.6834	-.7577	-.6407	-.4590	-.3072
.953	-.6525	-.7563	-.7611	-.6159	-.4405	-.2786
ALPHA (5) = 11.931	SETA (3) = .185	MACH = .59656	0 = 594.57	P = 2386.7	RNL = 4.8403	
SECTION : 1) RIGHT HAND INSIDE	DEPENDENT VARIABLE CP					
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.759	-.5485	-.594	-.6952	-.6562	-.5402	-.3528
.757	-.5544	-.6261	-.7174	-.6927	.0000	-.3559
.905	-.5758	-.6381	-.7295	-.6673	-.5141	-.3428
.697	-.6129	-.6953	-.7551	-.6502	-.4938	-.3272
.953	-.6530	-.7565	-.7587	-.6469	-.4654	-.3099

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(OAI4B) -140A/B/C/R ORB SPEED BRAKE
SECTION: 1 RIGHT HAD INSIDE
Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CP
.769 -.5303 -.5935 -.6923 -.6509 -.5023 -.3107
.757 -.5461 -.6095 -.7297 -.6539 -.0000 -.3072
.855 -.5677 -.6453 -.7489 -.6106 -.4741 -.3036
.837 -.5747 -.7150 -.7408 -.6352 -.4360 -.3034
.368 -.673+ -.7591 -.7404 -.5075 -.4299 -.2877
ALPHA: 5. = 11.359 BETA: 5. = 8.309 MACH = .59656 Q = 594.57 P = 2386.7 RNL = -.8403
SECTION: 1 RIGHT HAD INSIDE
Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CP
.769 -.5303 -.5935 -.6923 -.6509 -.5023 -.3107
.757 -.5461 -.6095 -.7297 -.6539 -.0000 -.3072
.855 -.5677 -.6453 -.7489 -.6106 -.4741 -.3036
.837 -.5747 -.7150 -.7408 -.6352 -.4360 -.3034
.368 -.673+ -.7591 -.7404 -.5075 -.4299 -.2877
DEPENDENT VARIABLE CP
P = 2386.7 RNL = -.8403

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(XEBK68)

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TANDEM ATED PROCESSURE DATA - OA148 (AMES 11-073-1)

6x6 S 11-073(0A)481 -1400/B/C 038 SPEED BRAKE

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C ORB SPEED BRAKE
 $\alpha_{L048} + \beta = .009$ $\beta_{T4} (1) = -3.858$ MACH = .90190 C = 601.65 P = 1056.6 RNL = 3.6047

SECTION - UPFLIGHT HEAD INSIDE

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

γ/C
 .7568 -.4535 -.4937 -.545 .5910 -.5436 -.4366
 .757 -.4642 -.4944 -.5719 -.5926 .0000 -.4347
 .655 -.4338 -.5150 -.5941 -.6042 -.5372 -.4305
 .657 -.5145 -.5607 -.6137 -.6142 -.5308 -.4191
 .657 -.5387 -.6038 -.6345 -.6341 -.5348 -.4061

$\alpha_{L048} + \beta = .009$ $\beta_{T4} (1) = .177$ MACH = .90190 C = 601.65 P = 1056.6 RNL = 3.6047

DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

$\alpha_{L048} + \beta = .009$ $\beta_{T4} (1) = .253$ MACH = .90190 C = 601.65 P = 1056.6 RNL = 3.6047

DEPENDENT VARIABLE CP

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

$\alpha_{L048} + \beta = .009$ $\beta_{T4} (1) = -3.352$ MACH = .90023 C = 600.76 P = 1057.6 RNL = 3.5912

DEPENDENT VARIABLE CP

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

$\alpha_{L048} + \beta = .009$ $\beta_{T4} (1) = -3.352$ MACH = .90023 C = 600.76 P = 1057.6 RNL = 3.5912

DEPENDENT VARIABLE CP

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

DEPENDENT VARIABLE CP

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

DEPENDENT VARIABLE CP

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

DEPENDENT VARIABLE CP

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

DEPENDENT VARIABLE CP

γ/C
 .7578 -.4543 -.4944 -.5154 -.5267 -.4209
 .757 -.4644 -.4945 -.5714 -.5349 .0000 -.4253
 .655 -.4341 -.5151 -.5924 -.5249 -.4128
 .657 -.5145 -.5602 -.6136 -.5349 -.4379
 .657 -.5387 -.6039 -.6343 -.5447 -.4611 -.3985

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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		AMES 11-073(0A14B) - 140A/B/C		ORB SPEED	BRANE	(XE869)
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z-EV	.3170	.4125	.5070	.6020	.6970	.7920
X-CV						
Z-EV	.4030	-.4149	-.4971	-.5321	-.4957	-.4109
	.4225	-.4529	-.5160	-.5389	-.0000	-.4050
	.4259	-.4517	-.5361	-.5446	-.4936	-.4036
	.4685	-.5052	-.5555	-.5425	-.4740	-.3943
	.4683	-.5372	-.5772	-.5489	-.4728	-.3850
A-F+4 + 3) = 4.005	BETA (2) =	4.125	4.240	MACH =	.90083	0 = 600.76
SECTION 1: RIGHT HAND INSIDE				DEPENDENT VARIABLE CP		
Z-EV	.3172	.4120	.5070	.6020	.6970	.7920
X-CV						
Z-EV	.4665	-.5621	-.5776	-.5372	-.4088	
	.5637	-.6021	-.5944	-.0000	-.4039	
	.6003	-.6072	-.6012	-.5257	-.4046	
	.6241	-.6246	-.5892	-.5146	-.4011	
	.6366	-.6373	-.6245	-.5935	-.4932	-.3853
A-F+4 + 4) = 7.076	BETA (1) =	7.076	7.385	MACH =	.89993	0 = 600.24
SECTION 1: RIGHT HAND INSIDE				DEPENDENT VARIABLE CP		
Z-EV	.3170	.4120	.5070	.6020	.6970	.7920
X-CV						
Z-EV	.4712	-.6221	-.5705	-.5453	-.4268	
	.5733	-.6224	-.5939	-.6201	-.0000	-.4157
	.6261	-.6262	-.6135	-.5237	-.4034	
	.6814	-.6813	-.6526	-.6335	-.5227	-.4081
	.6814	-.6818	-.6600	-.6253	-.5118	-.3911
A-F+4 + 4) = 7.978	BETA (2) =	7.978	8.182	MACH =	.89993	0 = 600.24
SECTION 1: RIGHT HAND INSIDE				DEPENDENT VARIABLE CP		
Z-EV	.3170	.4120	.5070	.6020	.6970	.7920
X-CV						
Z-EV	.4665	-.5277	-.5155	-.5159	-.1349	
	.5637	-.5642	-.5630	-.5203	-.17692	
	.6003	-.5722	-.5726	-.4232	-.12919	
	.6241	-.6245	-.6242	-.4913	-.1310	
	.6366	-.6373	-.6362	-.4778	-.13704	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (4) = 7.979 BETA (3) = 4.241 MACH = .89693 0 = 600.24 P = 1058.8 RN/L = 3.5557

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.738 -.4581 -.4950 -.5626 -.5901 -.5374 -.4112
 .757 -.4702 -.5897 -.6118 -.6099 -.0000 -.4074
 .805 -.4822 -.5188 -.6165 -.6198 -.5307 -.4126
 .897 -.5214 -.5753 -.6487 -.6153 -.5194 -.4002
 .958 -.5535 -.6189 -.6532 -.6021 -.5033 -.3887

ALPHA (5) = 11.953 BETA (1) = -3.853 MACH = .90010 0 = 600.36 P = 1058.5 RN/L = 3.5793

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.738 -.4939 -.5395 -.5907 -.6222 -.5710 -.4439
 .757 -.4960 -.5315 -.6151 -.6357 -.0000 -.4346
 .805 -.5154 -.5507 -.6409 -.6323 -.5952 -.4254
 .897 -.5426 -.6373 -.6705 -.6347 -.5317 -.4125
 .958 -.5733 -.6378 -.5925 -.6235 -.5284 -.3968

ALPHA (5) = 11.955 BETA (2) = .189 MACH = .90010 0 = 600.36 F = 1058.5 RN/L = 3.5793

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.738 -.4451 -.4773 -.5354 -.5700 -.5269 -.4037
 .757 -.4581 -.4923 -.5665 -.5867 -.0000 -.4023
 .805 -.4620 -.5035 -.5717 -.5818 -.4988 -.3952
 .897 -.4837 -.5536 -.6149 -.5844 -.4782 -.3907
 .958 -.5192 -.5936 -.6216 -.5659 -.4780 -.3904

ALPHA (5) = 11.949 BETA (3) = 4.260 MACH = .90010 0 = 600.36 P = 1058.5 RN/L = 3.5793

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.738 -.4815 -.5271 -.5905 -.6195 -.5626 -.4568
 .757 -.4862 -.5265 -.6322 -.6277 -.0000 -.4410
 .805 -.5115 -.5522 -.6223 -.6223 -.5444 -.4327
 .897 -.5446 -.5331 -.5354 -.6301 -.5359 -.4235
 .958 -.5692 -.6655 -.6625 -.6173 -.5271 -.4114



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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C CRB SPEED BRAKE

REFERENCE DATA

SREF =	2690.0000	SO.FT.	XMRP =	1076.6800	IN. X0
LREF =	.474.8900	IN.	YMRP =	.0000	IN. Y0
BREF =	.936.0580	IN.	ZMRP =	.375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -3.949 BETA (1) = -7.852 MACH = .59666 0 = 594.81

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .708 -.5922 -.6272 -.7379 -.6728 -.5304 -.3595

.757 -.5798 -.6390 -.7398 -.6687 .0000 -.3528

.805 -.5979 -.6738 -.6787 -.6599 -.5030 -.3429

.887 -.5218 -.7359 -.7710 -.6728 -.4911 -.3311

.969 -.6627 -.7785 -.7926 -.6562 -.5087 -.3424

ALPHA (1) = -3.933 BETA (2) = -3.843 MACH = .59666 0 = 594.81

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .708 -.4916 -.5471 -.6304 -.5957 -.4966 -.3539

.757 -.5013 -.5471 -.6313 -.6199 .0000 -.3461

.805 -.5269 -.5875 -.6772 -.6043 -.4876 -.3469

.887 -.5523 -.6419 -.6784 -.5944 -.4699 -.3218

.969 -.5993 -.6796 -.6739 -.5859 -.4540 -.3194

ALPHA (1) = -3.929 BETA (3) = .169 MACH = .59666 0 = 594.81

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .708 -.4752 -.5349 -.6167 -.5998 -.4672 -.3397

.757 -.4985 -.5309 -.6304 -.5989 .0000 -.3267

.805 -.5090 -.5943 -.6535 -.5961 -.4770 -.3212

.887 -.5478 -.6430 -.6951 -.5833 -.4599 -.3175

.969 -.5788 -.6859 -.6855 -.5676 -.4322 -.2898

PARAMETRIC DATA

RUDDER =	.000	SPDBRK =	55.000
BLDFLAP =	22.500	L-ELVN =	-10.000
R-ELVN =	-10.000	MACH =	.600

RN/L = 4.8517

RN/L = 2387.0

RN/L = 4.8517

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C ORB SPEED BRAKE							(XEBK70)	RNL = 4.8517
ALPHA (1) = -3.935	DETA (4) = 4.269	MACH = .59666	0	= 594.81	P = 2387.6	RNL = 4.8517		
DEPENDENT VARIABLE CP								
SECTION 1: RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CP								
.708	-4.987	-5528	-5380	-6125	-4873	-3284		
.757	-5.049	-5582	-6695	-6238	.0000	-3187		
.805	-5.274	-6094	-6670	-6118	-4715	-3111		
.837	-5.744	-6551	-6912	-5860	-4381	-3096		
.868	-6.195	-7044	-6905	-5708	-4223	-2871		
ALPHA (1) = -3.949	BETA (5) = 8.334	MACH = .59666	0	= 594.81	P = 2387.6	RNL = 4.8517		
SECTION 1: RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CP								
.732	-5.792	-6351	-7365	-6675	-5093	-3434		
.757	-5.837	-6323	-7415	-6528	.0000	-3422		
.805	-6.196	-6290	-7425	-6609	-4938	-3287		
.837	-6.457	-7452	-7887	-6336	-4589	-3161		
.868	-7.163	-9379	-7779	-5995	-4135	-2944		
ALPHA (2) = -6.43	BETA (1) = -7.888	MACH = .59628	0	= 593.97	P = 2386.4	RNL = 4.8452		
SECTION 1: RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CP								
.728	-6.662	-7788	-6535	-7471	-5279	-3070		
.757	-6.632	-77417	-6944	-7793	.0000	-2909		
.805	-7.211	-6524	-6281	-7527	-5077	-2902		
.837	-7.215	-6515	-6149	-7154	-4627	-2628		
.868	-7.213	-6507	-6161	-6817	-4276	-2773		
ALPHA (2) = -6.055	BETA (2) = -3.864	MACH = .59628	0	= 593.97	P = 2386.4	RNL = 4.8452		
SECTION 1: RIGHT HAND INSIDE								
Z/BV	.2170	.4120	.5070	.6020	.6970	.7920		
X/CP								
.703	-5.202	-5797	-6715	-6331	-4936	-3399		
.757	-5.379	-5931	-7085	-6459	.0000	-3251		
.805	-5.456	-6335	-7177	-6346	-4784	-3159		
.837	-5.900	-6870	-7307	-6168	-4505	-3067		
.868	-6.420	-7375	-7267	-6033	-4524	-2895		

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AMES 11-073(04148) - 1140A/B/C							ORB SPEED BRAKE	(XEBK70)
SECTION (1)RIGHT HAND INSIDE							DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY	-.5058	-.5584	-.6498	-.6100	-.5122	-.3300		
	-.708	-.5162	-.5657	-.6842	-.6316	-.0000	-.3227	
	.757	-.5128	-.6180	-.7058	-.6185	-.4850	-.3080	
	.805	-.579	-.6704	-.7115	-.6107	-.4449	-.3004	
	.887	-.6269	-.7250	-.7198	-.5922	-.4330	-.2804	
ALPHA (2) = .056	BETA (4) = 4.251	MACH = .59628	0	= 593.97	P	= 2386.4	RNL = 4.8452	
SECTION (1)RIGHT HAND INSIDE							DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY	-.5372	-.6046	-.6973	-.6389	-.4980	-.3010		
	.757	-.5410	-.6147	-.7068	-.6444	-.0000	-.3098	
	.805	-.5571	-.6576	-.7229	-.6392	-.4761	-.2970	
	.887	-.6135	-.7253	-.7654	-.6192	-.4248	-.2905	
	.968	-.6336	-.7707	-.7651	-.5954	-.4123	-.2726	
ALPHA (2) = .051	BETA (5) = 8.306	MACH = .59528	0	= 593.97	P	= 2386.4	RNL = 4.8452	
SECTION (1)RIGHT HAND INSIDE							DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY	-.6291	-.7120	-.8354	-.7049	-.4888	-.2483		
	.708	-.6430	-.7346	-.8628	-.7073	-.0000	-.2645	
	.757	-.5895	-.7791	-.8559	-.7030	-.4454	-.2600	
	.805	-.7374	-.958	-.8633	-.6541	-.4162	-.2375	
	.887	-.8261	-.9545	-.8385	-.6041	-.3617	-.2356	
ALPHA (3) = .000	BETA (1) = -7.898	MACH = .59578	0	= 593.03	P	= 2386.8	RNL = 4.8456	
SECTION (1)RIGHT HAND INSIDE							DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CY	-.7228	-.7719	-.8900	-.7749	-.5725	-.3133		
	.757	-.7213	-.7762	-.8112	-.8004	-.0000	-.3021	
	.805	-.7513	-.8267	-.8101	-.7692	-.5313	-.3014	
	.887	-.7929	-.9371	-.8346	-.7262	-.4663	-.2238	
	.968	-.7929	-.9371	-.8346	-.7256	-.4256	-.2244	

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TASULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (3) = 4.002		BETA (2) = -3.861	MACH = .59578	Q = 593.03	P = 2386.8	RNL = 4.8456
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				(XEBK70)
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.723	-.5455	-.6009	-.6201	-.4696	-.2778	
.757	-.5384	-.6094	-.7206	-.0000	-.2770	
.805	-.5497	-.6765	-.7519	-.6258	-.4406	
.887	-.5948	-.7240	-.7374	-.6118	-.2697	
.958	-.6553	-.7736	-.7422	-.5881	-.3993	-.2798
ALPHA (3) = 4.003	BETA (3) =	.182	MACH = .59578	Q = 593.03	P = 2386.8	RNL = 4.8456
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.723	-.5178	-.5525	-.6757	-.6132	-.4980	-.3275
.757	-.5248	-.5832	-.6788	-.6431	-.0000	-.3270
.805	-.5742	-.6648	-.7036	-.6374	-.4840	-.3163
.887	-.5747	-.6620	-.7228	-.6244	-.4635	-.3048
.958	-.6212	-.7231	-.7181	-.5963	-.4433	-.2948
ALPHA (3) = 4.003	BETA (4) = 4.239	MACH = .59578	Q = 593.03	P = 2386.8	RNL = 4.8456	
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.723	-.5441	-.6159	-.7154	-.6208	-.4232	-.2598
.757	-.5604	-.6250	-.7192	-.6412	-.0000	-.2641
.805	-.5637	-.6933	-.7649	-.6248	-.4301	-.2427
.887	-.6135	-.7722	-.7723	-.5955	-.3858	-.2553
.958	-.7552	-.8158	-.7513	-.5704	-.3573	-.2239
ALPHA (3) = 4.003	BETA (5) = 8.292	MACH = .59578	Q = 593.03	P = 2386.8	RNL = 4.8456	
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.723	-.6533	-.7451	-.8781	-.7277	-.5027	-.2716
.757	-.5712	-.7677	-.9076	-.7538	-.0000	-.2595
.805	-.7801	-.8556	-.9074	-.7327	-.4764	-.2564
.887	-.7807	-.9526	-.9112	-.6780	-.4184	-.2434
.958	-.8733	-.9871	-.8745	-.6201	-.3918	-.2205

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C ORB SPEED BRAKE (XEBK70)						
ALPHA (4) =	7.945	BETA (1) =	-7.890	MACH =	.59630	P = 2386.4
SECTION :	RIGHT HAND INSIDE			DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.6318	-.6999	-.7915	-.6919	-.4753	-.2764
.757	-.6259	-.7133	-.8155	-.6701	.0000	-.2636
.805	-.6355	-.7561	-.8291	-.6708	-.4466	-.2537
.857	-.6744	-.8085	-.8331	-.6480	-.4029	-.2361
.909	-.7312	-.8580	-.8186	-.6480	-.3775	-.2551
ALPHA (4) =	7.955	BETA (2) =	-3.860	MACH =	.59630	P = 2386.4
SECTION :	RIGHT HAND INSIDE			DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.5242	-.5939	-.6767	-.6250	-.4468	-.2825
.757	-.5291	-.5877	-.6942	-.6247	.0000	-.2668
.805	-.5389	-.6355	-.7232	-.6134	-.4158	-.2645
.857	-.5859	-.7218	-.7355	-.5927	-.4023	-.2646
.909	-.6445	-.7455	-.7372	-.5792	-.3980	-.2756
ALPHA (4) =	7.955	BETA (3) =	.181	MACH =	.59630	P = 2386.4
SECTION :	RIGHT HAND INSIDE			DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.5014	-.5512	-.6413	-.6195	-.4995	-.3392
.757	-.5153	-.5675	-.6550	-.6375	.0000	-.3222
.805	-.5230	-.6242	-.7069	-.6186	-.4922	-.3120
.857	-.5625	-.6625	-.6958	-.6030	-.4552	-.3133
.909	-.6253	-.7159	-.6938	-.5928	-.4472	-.3027
ALPHA (4) =	7.955	BETA (4) =	4.234	MACH =	.59630	P = 2386.4
SECTION :	RIGHT HAND INSIDE			DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV						
.708	-.5262	-.5845	-.6983	-.6108	-.4422	-.2646
.757	-.5417	-.6108	-.7126	-.6224	.0000	-.2639
.805	-.5483	-.6479	-.7225	-.6365	-.4176	-.2558
.857	-.5226	-.7339	-.7291	-.5961	-.3887	-.2497
.909	-.6752	-.7714	-.7173	-.5591	-.3619	-.2461

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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		AMES 11-073(OA148) -140A/B/C		ORB SPEED BRAKE	(Y584770)
ALPHA (4) =	7.35+	BETA (5) =	8.280	MACH = .59630	O = * 593.97 P = 2386.4 RNL = 4.6482
SECTION 1: RIGHT HAND INSIDE				DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.7728	-.6057	-.6755	-.8055	-.6766	-.4378 -.2491
.757	-.6316	-.6927	-.8278	-.6884	-.0300 -.2495
.695	-.6488	-.7355	-.8264	-.6680	-.4420 -.2353
.697	-.7508	-.6838	-.8419	-.6405	-.3901 -.2504
.958	-.8034	-.9049	-.8069	-.5712	-.3480 -.2329
ALPHA (5) = 11.325	BETA (2) =	-7.848	MACH = .59584	O = * 593.15 P = 2386.7 RNL = 4.6434	
SECTION 1: RIGHT HAND INSIDE				DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.779	-.5182	-.5697	-.6639	-.6093	-.4795 -.3044
.557	-.5184	-.6345	-.6910	-.6221	-.0000 -.3009
.625	-.5357	-.6339	-.6922	-.6119	-.4586 -.2933
.657	-.5358	-.7159	-.7138	-.5964	-.4327 -.2437
.939	-.6223	-.6442	-.7174	-.5972	-.4104 -.2425
ALPHA (5) = 11.342	BETA (2) =	-3.851	MACH = .59584	O = * 593.15 P = 2386.7 RNL = 4.6434	
SECTION 1: RIGHT HAND INSIDE				DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.779	-.5039	-.5619	-.6584	-.6052	-.4762 -.3006
.557	-.5032	-.5624	-.6591	-.6303	-.0000 -.2942
.625	-.5351	-.6171	-.6939	-.6136	-.4552 -.2871
.657	-.5352	-.6741	-.7026	-.6026	-.4376 -.2799
.939	-.6226	-.7251	-.7148	-.5793	-.4071 -.2756
ALPHA (5) = 11.347	BETA (3) =	.182	MACH = .59584	O = * 593.15 P = 2386.7 RNL = 4.6434	
SECTION 1: RIGHT HAND INSIDE				DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.779	-.4882	-.5568	-.5524	-.5179	-.4924 -.2253
.557	-.5382	-.6539	-.6367	-.6141	-.3006 -.3134
.625	-.5351	-.5132	-.6928	-.6184	-.1609 -.3146
.657	-.5352	-.6714	-.7115	-.6172	-.4540 -.3103
.939	-.6227	-.7255	-.7063	-.5615	-.4407 -.2796

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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AMES 11-073!OAI4B1 -140A/B/C ORB SPEED BRAKE SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	- .5052	- .5538	- .6549	- .6222	- .4635	- .2970
	- .523	- .5611	- .6850	- .6195	- .0000	- .2997
	- .5436	- .6209	- .7111	- .6136	- .4410	- .2729
	- .5971	- .6958	- .7194	- .5904	- .4189	- .2608
	- .6475	- .7253	- .7101	- .5678	- .4038	- .2606
$\alpha_{\text{PH4}} (5) = 11.942$	$\beta_{\text{TA}} (4) = 4.245$	$\text{MACH} = .59584$	$\text{P} = 593.15$	$\text{P} = .59584$	$\text{P} = 593.15$	$\text{P} = .59584$
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	- .5859	- .6694	- .7741	- .6729	- .4907	- .2552
	- .6095	- .6847	- .7836	- .6860	- .0000	- .2557
	- .6254	- .7416	- .8070	- .6767	- .4421	- .2542
	- .7106	- .8218	- .8172	- .6554	- .0988	- .2481
	- .7732	- .8720	- .7615	- .5978	- .2665	- .2389
$\alpha_{\text{PH4}} (5) = 11.935$	$\beta_{\text{TA}} (5) = 8.309$	$\text{MACH} = .59584$	$\text{P} = 593.15$	$\text{P} = .59584$	$\text{P} = 593.15$	$\text{P} = .59584$

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C ORB SPEED BRAKE

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(XEB71) (13 AUG 75)

REFERENCE DATA

XREF = 2590 000 SQ.FT	XMP = 1076.6800 IN. X0
ZREF = +74.8000 IN.	YMP = .0000 IN. Y0
BREF = 935.2500 IN.	ZMP = 375.0000 IN. Z0
SCALE = .0200	

ALPHA (1) = -3.946 BETA (1) = -3.857 MACH = 1.3971

SECTION 1 : PITCH HGT : SIDE DEPENDENT VARIABLE CP

Z/B	.3170	.4120	.5070	.6020	.6970	.7920
-----	-------	-------	-------	-------	-------	-------

X/CV	.5693	.5826	.6026	.6111	.6893	.5445
.787	.5673	.5855	.6154	.6097	.6000	.5429
.835	.5673	.5835	.6153	.6092	.5815	.5402
.883	.5686	.5835	.6125	.5847	.5755	.5349
.931	.5686	.5833	.6178	.5995	.5687	.5263

ALPHA (2) = -3.946 BETA (2) = .190 MACH = 1.3971

SECTION 1 : PITCH HGT : INSIDE DEPENDENT VARIABLE CP

Z/B	.3170	.4120	.5070	.6020	.6970	.7920
-----	-------	-------	-------	-------	-------	-------

X/CV	.5830	.5833	.6029	.6229	.5858	.5573
.757	.5854	.5831	.6050	.5022	.0000	.5566
.815	.5849	.5839	.6079	.5022	.5834	.5569
.873	.5865	.5835	.6105	.5370	.5801	.5541
.931	.5884	.5837	.6119	.5933	.5687	.5392

ALPHA (3) = -3.946 BETA (3) = 4.272 MACH = 1.3971

SECTION 1 : PITCH HGT : SIDE DEPENDENT VARIABLE CP

Z/B	.3170	.4120	.5070	.6020	.6970	.7920
-----	-------	-------	-------	-------	-------	-------

X/CV	.5635	.5630	.5269	.5055	.5823	.5561
.757	.5634	.5633	.6225	.5958	.0201	.5552
.815	.5631	.5633	.6232	.5955	.5805	.5552
.873	.5630	.5633	.6231	.5951	.5762	.5534
.931	.5631	.5633	.6233	.5850	.5573	.5457

SECTION 1 : PITCH HGT : INSIDE DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - DATA 14 (AMES 11-073-1)

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SECTION 1: RIGHT HAND INSIDE		DEFINITION VARIABLE CP		AFTS 11-073(DA148) - 140A/B/C ORB SPEED BRAKE (XEB71)	
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.708	-.6058	-.5994	-.6175	-.6253	-.5061 -.5657
.757	-.5927	-.6027	-.6244	-.6251	-.5000 -.5638
.805	-.5906	-.5091	-.6280	-.6242	-.5999 -.5617
.897	-.5972	-.6209	-.6310	-.6206	-.5947 -.5558
.958	-.6536	-.6257	-.6336	-.6186	-.5876 -.5477
ALPHA : 2) = .022	BETA : 1) = .11	MACH : 1) = -3.873	MACH : 2) = 1.3971	P = 600.47	RNL = 439.47
SECTION 1: RIGHT HAND INSIDE		DEFINITION VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.708	-.6052	-.6022	-.5122	-.6146	-.5984 -.5687
.757	-.5983	-.6021	-.6157	-.6144	-.5000 -.5685
.805	-.5935	-.5187	-.6186	-.5963	-.5678 -.5537
.897	-.5839	-.6116	-.6236	-.5944	-.55918 -.5499
.958	-.6012	-.6155	-.6227	-.6037	-.5604 -.5551
ALPHA : 2) = .018	BETA : 1) = .318	MACH : 1) = 4.248	MACH : 2) = 1.3971	P = 600.47	RNL = 439.47
SECTION 1: RIGHT HAND INSIDE		DEFINITION VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.705	-.6117	-.6300	-.6399	-.6083	-.5928 -.5679
.757	-.5379	-.6235	-.6157	-.6078	-.5000 -.5669
.805	-.5385	-.5071	-.6152	-.6045	-.5912 -.5667
.897	-.6024	-.6142	-.6151	-.6256	-.5876 -.5551
.958	-.6019	-.6156	-.6156	-.5385	-.5795 -.5549
ALPHA : 3) = .351	BETA : 1) = .351	MACH : 1) = -3.877	MACH : 2) = 1.3951	P = 600.56	RNL = 440.18
SECTION 1: RIGHT HAND INSIDE		DEFINITION VARIABLE CP			
Z/BV	.3170	.4120	.5070	.6020	.6970 .7920
X/CY					
.709	-.6097	-.6028	-.6159	-.5234	-.5028 -.5755
.757	-.6032	-.6052	-.6125	-.5235	-.5031 -.5743
.805	-.6037	-.6124	-.6125	-.5235	-.5031 -.5731
.897	-.6013	-.6153	-.6153	-.5235	-.5020 -.5720
.958	-.6003	-.6153	-.6153	-.5235	-.5020 -.5596

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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		AMES 11-073(OA14B) - 1404/B/C		ORB SPEED BRAKE	(XEBCT1)		
α	β	γ	δ	MACH	P	RNL	
SECTION : RIGHT HAND INSIDE Z-BY							
				DEPENDENT VARIABLE CP			
		X/CP					
	-7.708	-6106	-6056	-6172	-6219	-6060	-5770
	-7.757	-6040	-6075	-6219	-6210	.0000	-5763
	-8.055	-6037	-6118	-6229	-6212	-6032	-5761
	-8.37	-6547	-5747	-5259	-6179	-5989	-5719
	-9.53	-6365	-58219	-6259	-6129	-5894	-5584
α_{PA}	(3) =	3.955	β_{TA} (3) =	4.242	MACH	= 1.3961	0
SECTION : RIGHT HAND : SIDE Z-BY							
				DEPENDENT VARIABLE CP			
		X/CP					
	-7.708	-6150	-6257	-6214	-6248	-6055	-5729
	-7.757	-6022	-6081	-6254	-6249	.0000	-5712
	-8.055	-6117	-6134	-6293	-6250	-5622	-5700
	-8.37	-6355	-5237	-6312	-6219	-5967	-5663
	-9.53	-6398	-6293	-6324	-6174	-5907	-5522
α_{PA}	(4) =	7.337	β_{TA} (4) =	-3.873	MACH	= 1.3969	0
SECTION : RIGHT HAND INSIDE Z-BY							
				DEPENDENT VARIABLE CP			
		X/CP					
	-7.708	-6151	-6382	-6202	-6239	-6090	-5802
	-7.757	-6151	-6156	-6253	-6226	.0000	-5806
	-8.055	-6056	-6151	-6259	-6238	-6067	-5789
	-8.37	-6384	-6219	-6279	-6226	-6014	-5754
	-9.53	-6332	-6357	-6279	-6157	-5928	-5559
α_{PA}	(4) =	7.336	β_{TA} (4) =	.177	MACH	= 1.3969	0
SECTION : RIGHT HAND INSIDE Z-BY							
				DEPENDENT VARIABLE CP			
		X/CP					
	-7.708	-6151	-6181	-6193	-5233	-6098	-5830
	-7.757	-6151	-6157	-6233	-5233	.0000	-5822
	-8.055	-6155	-6131	-6242	-5238	-5081	-5820
	-8.37	-6158	-6249	-6261	-6214	-5026	-5782
	-9.53	-6378	-6245	-6278	-6176	-5936	-5651

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\alpha_{\text{PFA}} (\gamma) = 7.692$ $\beta_{\text{TA}} (\gamma) = 4.237$ MACH = 1.3959 0 = 600.27 P = 439.47 RNL = 2.9090

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.758 -.6220 -.6125 -.6275 -.6339 -.6187 -.5820
 .757 -.6082 -.6155 -.6332 -.6347 .0000 -.5806
 .855 -.6263 -.6215 -.6363 -.6354 -.6139 -.5792
 .637 -.6113 -.6277 -.6397 -.6220 -.6097 -.5705
 .569 -.6161 -.6318 -.6387 -.6280 -.6044 -.5601

ALPHA : 51 = 11.960 $\beta_{\text{TA}} (1) = -3.861$ MACH = 1.3954 0 = 600.16 P = 439.71 RNL = 2.9137

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.6179 -.6112 -.6235 -.6266 -.6123 -.5849
 .757 -.6083 -.6133 -.6278 -.6259 -.6000 -.5837
 .655 -.6073 -.6179 -.6292 -.6259 -.6094 -.5832
 .897 -.6102 -.6252 -.6302 -.6256 -.6061 -.5806
 .569 -.6121 -.6295 -.6292 -.6192 -.5975 -.5727

ALPHA : 51 = 11.959 $\beta_{\text{TA}} (2) = .177$ MACH = 1.3954 0 = 600.16 P = 439.71 RNL = 2.9137

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.6242 -.6150 -.6235 -.6287 -.6163 -.5897
 .757 -.6138 -.6165 -.6282 -.6287 .0000 -.5888
 .855 -.6133 -.6199 -.6301 -.6295 -.6144 -.5900
 .887 -.6142 -.6249 -.6306 -.6273 -.6092 -.5851
 .958 -.6147 -.6277 -.6318 -.6242 -.6007 -.5708

ALPHA : 51 = 11.957 $\beta_{\text{TA}} (3) = 4.251$ MACH = 1.3954 0 = 600.16 P = 439.71 RNL = 2.9137

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.6225 -.6127 -.5279 -.6365 -.6220 -.5839
 .757 -.5257 -.6122 -.5336 -.6374 .0000 -.5820
 .855 -.6355 -.6206 -.6267 -.6372 -.6165 -.5799
 .887 -.6122 -.6255 -.6285 -.6351 -.6127 -.5766
 .958 -.6150 -.6331 -.6284 -.6325 -.6094 -.5680

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C ORB SPEED BRAKE
 $(XECR71)$
 $RNL = 2.9185$

ALPHA (6) = 15.903 BETA (1) = 3.8+0 MACH = 1.3960 0 = 600.45 P = 440.18
 SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY .728 -.6298 -.5222 -.5343 -.6350 -.6226 -.5998
 .757 -.6172 -.5262 -.6+03 -.6340 -.6000 -.5995
 .805 -.6169 -.5321 -.6+04 -.6347 -.6195 -.5991
 .867 -.6210 -.5379 -.6+05 -.6321 -.6159 -.5955
 .902 -.6241 -.5402 -.5385 -.6250 -.6119 -.5897

ALPHA (6) = 15.917 BETA (2) = 1.180 MACH = 1.3960 0 = 600.45 P = 440.18
 SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY .728 -.6291 -.6217 -.6333 -.6373 -.6250 -.5971
 .757 -.6205 -.6223 -.6378 -.6373 .0000 -.5957
 .825 -.6136 -.6274 -.6392 -.6371 -.6216 -.5959
 .887 -.6260 -.6381 -.6395 -.6357 -.6169 -.5935
 .938 -.6313 -.6312 -.6312 -.5314 -.6083 -.5818

ALPHA (6) = 15.910 BETA (3) = 4.260 MACH = 1.3960 0 = 600.45 P = 440.18
 SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY .728 -.6295 -.6265 -.6405 -.6448 -.6301 -.5944
 .757 -.6293 -.6262 -.6451 -.6483 .0000 -.5929
 .805 -.6292 -.6261 -.6412 -.6451 -.6256 -.5915
 .867 -.6291 -.6260 -.6434 -.6448 -.6234 -.5833
 .902 -.6297 -.6227 -.6+23 -.6+34 -.6220 -.5733

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C ORB SPEED BRAKE

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(13 AUG 75)

REFERENCE DATA

	XNPB = 2630.0000 SQ.FT.	XNPB = 1076.6800 IN. XC	YNPB = 0.0000 IN. YO	ZNPB = 375.0000 IN. ZO	RUDDER = -5.000	SPDRK = 55.000
	REF = 4.0000 IN.	REF = .0000 IN.	REF = .0000 IN.	REF = .0000 IN.	BLFLP = 16.300	L-ELVN = -10.000
	SCRF = 936.5680 IN.	SCRF = 936.5680 IN.	SCRF = 936.5680 IN.	SCRF = 936.5680 IN.	A-ELVN = -10.090	MACH = 1.250
ALPHA (1) = -3.944	BETA (1) = -3.854	MACH = 1.2471	O = 599.40	P = 550.63	RNL = 3.0068	
SECTION 1: UPIGHT H41C INSIDE	DEPENDENT VARIABLE CP					
2/81	.3170	.4120	.5070	.6020	.6970	.7920
A/C						
7/8	-7073	-5981	-7230	-7356	-7075	-6418
7/9	-7073	-5981	-7230	-7356	-7075	-6418
7/10	-7332	-7370	-6000	-6418	-6429	-6457
7/11	-7332	-7370	-6000	-6418	-6429	-6457
7/12	-7356	-6987	-6399	-6399	-6777	-6392
7/13	-7356	-6987	-6399	-6399	-6777	-6392
7/14	-7457	-7299	-6901	-6351	-6668	-6239
7/15	-7457	-7299	-6901	-6351	-6668	-6239
7/16	-7468	-7228	-6923	-6265	-6668	-6239
7/17	-7468	-7228	-6923	-6265	-6668	-6239
7/18	-6827	-7037	-7082	-6880	-6443	
7/19	-6827	-7037	-7082	-6880	-6443	
7/20	-6827	-7037	-7082	-6880	-6443	
7/21	-6827	-7037	-7082	-6880	-6443	
7/22	-6827	-7037	-7082	-6880	-6443	
7/23	-6827	-7037	-7082	-6880	-6443	
7/24	-6827	-7037	-7082	-6880	-6443	
7/25	-6827	-7037	-7082	-6880	-6443	
7/26	-6827	-7037	-7082	-6880	-6443	
7/27	-6827	-7037	-7082	-6880	-6443	
7/28	-6827	-7037	-7082	-6880	-6443	
7/29	-6827	-7037	-7082	-6880	-6443	
7/30	-6827	-7037	-7082	-6880	-6443	
7/31	-6827	-7037	-7082	-6880	-6443	
8/1	-6827	-7037	-7082	-6880	-6443	
8/2	-6827	-7037	-7082	-6880	-6443	
8/3	-6827	-7037	-7082	-6880	-6443	
8/4	-6827	-7037	-7082	-6880	-6443	
8/5	-6827	-7037	-7082	-6880	-6443	
8/6	-6827	-7037	-7082	-6880	-6443	
8/7	-6827	-7037	-7082	-6880	-6443	
8/8	-6827	-7037	-7082	-6880	-6443	
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8/11	-6827	-7037	-7082	-6880	-6443	
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12/4	-6827	-7037	-7082	-6880	-6443	
12/5	-6827	-7037	-7082	-6880	-6443	
12/6	-6827	-7037	-7082	-6880	-6	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C ORB SPEED BRAKE

ALPHA (2) = .045 BETA (1) = -3.865 MACH = 1.2470 0 = 599.89 P = 551.11 RN/L = 3.0108

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.7084	-.6998	-.7220	-.7351	-.7103	-.6565
.757	-.6917	-.7031	-.7325	-.7358	-.7000	-.6575
.625	-.6905	-.7115	-.7395	-.7358	-.7039	-.6563
.637	-.6976	-.7287	-.7456	-.7308	-.6955	-.6503
.563	-.7059	-.7380	-.7458	-.7241	-.6867	-.6381

ALPHA (2) = .053 BETA (2) = .176 MACH = 1.2470 0 = 599.89 P = 551.11 RN/L = 3.0108

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.7063	-.7013	-.7210	-.7298	-.7051	-.6658
.757	-.6959	-.7063	-.7206	-.7305	-.7000	-.6651
.625	-.6917	-.7108	-.7332	-.7305	-.7020	-.6639
.687	-.6939	-.7291	-.7386	-.7246	-.6965	-.6678
.563	-.7065	-.7377	-.7423	-.7182	-.6867	-.6492

ALPHA (2) = .045 BETA (3) = 4.247 MACH = 1.2470 0 = 599.89 P = 551.11 RN/L = 3.0108

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.7056	-.7033	-.7235	-.7271	-.7061	-.6674
.757	-.6975	-.7076	-.7267	-.7297	-.7000	-.6664
.625	-.6932	-.7149	-.7321	-.7263	-.7022	-.6688
.687	-.7055	-.7241	-.7380	-.7225	-.6982	-.6616
.563	-.7097	-.7315	-.7390	-.7189	-.6855	-.6458

ALPHA (3) = 3.383 BETA (1) = -3.876 MACH = 1.2481 0 = 600.17 P = 550.40 RN/L = -.0062

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.7092	-.7002	-.7154	-.7266	-.7095	-.6661
.757	-.6955	-.7059	-.7224	-.7262	-.7000	-.6675
.625	-.6919	-.7095	-.7254	-.7297	-.7052	-.6646
.687	-.6965	-.7161	-.7357	-.7271	-.7009	-.6608
.563	-.7045	-.7231	-.7350	-.7216	-.6880	-.6434

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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AMES 11-073(OAI4B) - 140A/B/C							ORB SPEED BRAKE	(XEBK72)
SECTION 1) RIGHT HAND INSIDE							DEPENDENT VARIABLE CP	
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CV								
.708	-.6923	-.6892	-.7147	-.7229	-.6980	-.6544		
.757	-.6761	-.6918	-.7190	-.7261	.0000	-.6497		
.805	-.6842	-.7021	-.7252	-.7247	-.6971	-.6542		
.887	-.6980	-.7161	-.7347	-.7211	-.6880	-.6498		
.958	-.6925	-.7251	-.7373	-.7123	-.6799	-.6348		
ALPHA (3) = 3.983	BETA (2) = .181	MACH = 1.2481	O = 600.17	P = 550.40	R/N/L = 3.0062			
SECTION 1) RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CP								
.708	-.7018	-.6975	-.7278	-.7389	-.7090	-.6540		
.757	-.6913	-.7051	-.7363	-.7390	.0000	-.6533		
.805	-.6911	-.7144	-.7545	-.7373	-.7016	-.6531		
.887	-.7058	-.7365	-.7511	-.7323	-.6952	-.6478		
.958	-.7137	-.7450	-.7473	-.7257	-.6876	-.6323		
ALPHA (4) = 7.933	BETA (1) = -3.872	MACH = 1.2470	O = 600.17	P = 550.40	R/N/L = 3.0127			
SECTION 1) RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CP								
.708	-.6897	-.6825	-.7043	-.7072	-.6867	-.6441		
.757	-.6744	-.6837	-.7043	-.7089	.0000	-.6408		
.805	-.6766	-.6902	-.7063	-.7108	-.6862	-.6420		
.887	-.6818	-.6970	-.7110	-.7082	-.6795	-.6326		
.958	-.5873	-.7234	-.7182	-.7010	-.6644	-.6177		
ALPHA (4) = 7.940	BETA (2) = .173	MACH = 1.2470	O = 599.90	P = 551.11	R/N/L = 3.0127			
SECTION 1) RIGHT HAND INSIDE								
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920		
X/CP								
.708	-.6565	-.6527	-.6254	-.7000	-.6749	-.6219		
.757	-.6477	-.6547	-.6569	-.7039	.0000	-.6190		
.805	-.6448	-.6575	-.7069	-.7029	-.6654	-.6145		
.887	-.5634	-.5593	-.7139	-.6993	-.6529	-.6124		
.958	-.6733	-.7023	-.7177	-.6893	-.6513	-.5994		

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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ALPHA (4) = 7.943 BETA (3) = 4.236 MACH = 1.2470 0 = 599.90 P = 551.11 RNL = 3.0127

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .759 -.6831 -.6800 -.7068 -.7135 -.6963 -.6325

.757 -.6731 -.6845 -.7125 -.7161 -.0000 -.5322

.805 -.6724 -.6959 -.7192 -.7153 -.6801 -.6329

.897 -.6812 -.7142 -.7254 -.7120 -.6730 -.6240

.953 -.6919 -.7204 -.7278 -.7080 -.6696 -.6116

ALPHA (5) = 12.023 BETA (1) = -3.853 MACH = 1.2460 0 = 599.73 P = 551.81 RNL = 3.0130

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV -.6552 -.6933 -.6727 -.6768 -.6560 -.6103

.757 -.6435 -.6552 -.6773 -.6901 -.0000 -.6134

.805 -.6433 -.6531 -.6801 -.6797 -.6532 -.6115

.897 -.6575 -.6753 -.6853 -.6789 -.6525 -.6094

.958 -.6614 -.6639 -.6877 -.6594 -.6363 -.6049

ALPHA (5) = 12.037 BETA (2) = 1.182 MACH = 1.2460 0 = 599.73 P = 551.81 RNL = 3.0130

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/AV -.6729 -.6722 -.6993 -.7158 -.6898 -.6356

.708 -.6629 -.5755 -.072 -.7156 -.0000 -.6340

.805 -.6631 -.6827 -.7136 -.7136 -.6841 -.6335

.887 -.6724 -.6977 -.7258 -.7155 -.6769 -.6258

.959 -.6937 -.7128 -.7239 -.7082 -.6655 -.6077

ALPHA (5) = 12.032 BETA (3) = 4.249 MACH = 1.2460 0 = 599.73 P = 551.81 RNL = 3.0130

SECTION : 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/AV -.6974 -.6792 -.7029 -.7111 -.6822 -.6301

.708 -.6574 -.6512 -.7106 -.7108 -.0000 -.6292

.805 -.6685 -.6839 -.7163 -.7106 -.6741 -.6280

.897 -.6802 -.7093 -.7225 -.7136 -.6695 -.6233

.968 -.6868 -.7164 -.7228 -.7058 -.6643 -.6095

AMES 11-073(0A14B) -140A/B/C ORB SPEED BRAKE

(XEB72)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/C ORB SPEED BRAKE

(XE8K73) (13 AUG 75)

REFERENCE DATA

S-HF = 2590.0000 SQ.FT. XMRP = 1076.6800 IN. XO
 L-PF = 474.8000 IN. YMRP = .0000 IN. YO
 ZREF = 936.0580 IN.
 SCALE = .0300 ZMRP = 375.0000 IN. ZO

ALPHA (1) = -3.958 BETA (1) = -3.850 MACH = 1.1008 0 = 600.53 P = 707.91 RN/L = 3.1821

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7898 -.7853 -.8201 -.8426 -.7998 -.7154
 .757 -.7705 -.7917 -.8350 -.8441 -.0000 -.7140
 .805 -.7639 -.8050 -.8488 -.8443 -.7884 -.7114
 .857 -.7929 -.8355 -.8650 -.8407 -.7799 -.7049
 .909 -.821 -.8647 -.8679 -.86298 -.7677 -.6863

ALPHA (1) = -3.953 BETA (2) = .190 MACH = 1.1008 0 = 600.53 P = 707.91 RN/L = 3.1821

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.7877 -.7892 -.8216 -.8431 -.8052 -.7308
 .757 -.7715 -.7942 -.8373 -.8431 -.0000 -.7277
 .805 -.7718 -.8054 -.8540 -.8454 -.7954 -.7287
 .857 -.8013 -.8280 -.8654 -.8414 -.7858 -.7195
 .908 -.8182 -.8573 -.8671 -.8309 -.7739 -.7018

ALPHA (1) = -3.950 BETA (3) = 4.266 MACH = 1.1008 0 = 600.53 P = 707.91 RN/L = 3.1821

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

.708	-.7933	-.7952	-.8272	-.8427	-.8048	-.7363
.757	-.7834	-.7956	-.8439	-.8453	-.0000	-.7298
.805	-.7783	-.8116	-.8565	-.8448	-.7968	-.7313
.857	-.8030	-.8407	-.8641	-.8420	-.7884	-.7286
.908	-.8228	-.8646	-.8603	-.8294	-.7763	-.7098

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TABULATED PRESSURE DATA - DATA 1 AMES 11-073-1

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ALPHA (2) = .047 BETA (1) = -3.859 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1830

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708 -.7602 -.7583 -.7698 -.8131 -.7764 -.6886
 .757 -.7443 -.7509 -.8040 -.8181 -.0000 -.6855
 .605 -.7419 -.7728 -.9173 -.8200 -.7619 -.6860
 .987 -.7633 -.8032 -.8356 -.8152 -.7536 -.6806
 .968 -.7821 -.8313 -.8423 -.8066 -.7424 -.6630

ALPHA (2) = .052 BETA (2) = .177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1830

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.769 .0000 .0000 -.8119 -.8283 .0000 .0000
 .757 .0000 .0000 -.8231 -.8354 .0000 .0000
 .655 .0000 .0000 -.8390 -.8342 .0000 .0000
 .937 .0000 -.8244 -.8555 -.8321 .0000 -.7095
 .968 .0000 -.8536 -.8556 .0000 .0000 -.6685

ALPHA (2) = .046 BETA (3) = 4.245 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1830

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.738 -.7656 -.7723 -.8085 -.8181 -.7805 -.7100
 .757 -.7545 -.7768 -.8195 -.8221 .0000 -.7069
 .605 -.7547 -.7966 -.8357 -.8250 -.7728 -.7057
 .987 -.7837 -.8249 -.8450 -.8209 -.7657 -.7005
 .958 -.7932 -.8442 -.8459 -.8114 -.7528 -.6807

ALPHA (3) = 4.012 BETA (1) = -3.872 MACH = 1.0998 0 = 599.93 P = 708.60 RNL = 3.1803

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708 -.7350 -.7326 -.7646 -.7910 -.7570 -.6742
 .757 -.7157 -.7381 -.7760 -.7970 .0000 -.6699
 .825 -.7210 -.7495 -.7951 -.7993 -.7472 -.6702
 .687 -.7400 -.7763 -.8148 -.7979 -.7351 -.6648
 .753 -.7591 -.7977 -.8219 -.7898 -.7247 -.6434

AMES 11-07310A1481 -140AV/B/C ORB SPEED BRAKE

(XEB73)

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV

X/CV

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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ALPHA (3) = 4.014 BETA (2) = .182 MACH = 1.0998 Q = 599.99 P = 708.60 RN/L = 3.1803

SECTION (1) RIGHT HAND INSIDE

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.708 -.7468 -.7503 -.7825 -.8037 -.7673 -.6952
 .757 -.7358 -.7572 -.8010 -.8094 -.8000 -.6940
 .805 -.7358 -.7563 -.8184 -.8115 -.7592 -.6952
 .887 -.7610 -.7968 -.8322 -.8108 -.7513 -.6908
 .968 -.7801 -.8235 -.8358 -.7994 -.7399 -.6698

ALPHA (3) = 4.006 BETA (3) = 4.238 MACH = 1.0998 Q = 599.99 P = 708.60 RN/L = 3.1803

SECTION (1) RIGHT HAND INSIDE

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.708 -.7595 -.7613 -.7962 -.8157 -.7731 -.7014
 .757 -.7480 -.7668 -.8084 -.8208 -.8000 -.6995
 .805 -.7494 -.7818 -.8258 -.8219 -.7650 -.6988
 .887 -.7785 -.8161 -.8400 -.8148 -.7533 -.6961
 .968 -.7905 -.8421 -.8434 -.8055 -.7429 -.6763

ALPHA (4) = 7.976 BETA (1) = -3.868 MACH = 1.1000 Q = 599.94 P = 708.36 RN/L = 3.1794

SECTION (1) RIGHT HAND INSIDE

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.708 -.7231 -.7290 -.7554 -.7834 -.7508 -.6668
 .757 -.7074 -.7357 -.7706 -.7930 .0000 -.6682
 .805 -.7157 -.7703 -.7832 -.7937 -.7444 -.6616
 .887 -.7321 -.7605 -.8039 -.7913 -.7311 -.6519
 .968 -.7493 -.7852 -.8139 -.7830 -.7173 -.6374

ALPHA (4) = 7.984 BETA (2) = .174 MACH = 1.1000 Q = 599.54 P = 708.36 RN/L = 3.1794

SECTION (1) RIGHT HAND INSIDE

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CV -.708 -.7365 -.7464 -.7762 -.8046 -.7641 -.6879
 .757 -.7291 -.7510 -.7948 -.8091 .0000 -.6864
 .805 -.7336 -.7579 -.8089 -.8148 -.7579 -.6819
 .887 -.7572 -.7901 -.8282 -.8065 -.7443 -.6777
 .968 -.7708 -.8149 -.8310 -.7963 -.7355 -.6572

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) - 140A/B/C ORB SPEED BRAKE (XEBK73)						
SECTION 1 (RIGHT HAND INSIDE Z/BV .3170 .4120 .5070 .6020 .6970 .7920 DEPENDENT VARIABLE CP X/CV						
ALPHA : 4) = 7.984	BETA : 3) = 4.233	MACH = 1.1000	Q = 0	= 599.94	P = 708.35	RNL = 3.1794
.708	-.7517	-.7610	-.7683	-.8064	-.7692	-.6983
.757	-.7379	-.7660	-.7990	-.8133	-.0000	-.6952
.805	-.7462	-.7715	-.8159	-.8133	-.7609	-.6942
.897	-.7753	-.8133	-.8323	-.8078	-.7514	-.6947
.958	-.7922	-.8236	-.8349	-.8028	-.7399	-.6720
ALPHA : 5) = 12.067	BETA : 1) = 3.848	MACH = 1.0997	Q = 0	= 599.84	P = 708.61	RNL = 3.1785
SECTION 1 (RIGHT HAND INSIDE Z/BV .3170 .4120 .5070 .6020 .6970 .7920 DEPENDENT VARIABLE CP X/CV						
ALPHA : 5) = 12.077	BETA : 2) = 180	MACH = 1.0997	Q = 0	= 599.84	P = 708.61	RNL = 3.1785
.738	-.7373	-.7339	-.7684	-.7751	-.7539	-.6895
.757	-.7287	-.7485	-.7734	-.7856	-.0000	-.6892
.805	-.7259	-.7559	-.7804	-.7849	-.7448	-.6890
.897	-.7445	-.7529	-.7899	-.7844	-.7417	-.6784
.958	-.7571	-.7701	-.7973	-.7756	-.7250	-.6627
ALPHA : 5) = 12.075	BETA : 3) = 4.245	MACH = 1.0997	Q = 0	= 599.84	P = 708.61	RNL = 3.1785
SECTION 1 (RIGHT HAND INSIDE Z/BV .3170 .4120 .5070 .6020 .6970 .7920 DEPENDENT VARIABLE CP X/CV						
ALPHA : 5) = 12.075	BETA : 3) = 4.245	MACH = 1.0997	Q = 0	= 599.84	P = 708.61	RNL = 3.1785
.728	-.7188	-.7300	-.7616	-.7816	-.7456	-.6717
.757	-.7105	-.7310	-.7754	-.7849	-.0000	-.6617
.805	-.7223	-.7410	-.7936	-.7887	-.7361	-.6617
.897	-.7415	-.7718	-.8071	-.7958	-.7308	-.6595
.958	-.7517	-.7956	-.8075	-.7804	-.7158	-.6418

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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REFERENCE DATA

AMES 11-073(OA14B) -140A/B/C ORB SPEED BRAKE						PARAMETRIC DATA		
						(XEBK74) 13 AUG 75		
						RUDDER = -5.000	SPDBRK = 55.000	
ZREF = 2630.0000 52.FT.	XMRP = 1076.6800 IN. X0	YMRP = .0000 IN. Y0	ZMRP = 375.0000 IN. Z0			BDFLAP = 16.300	L-ELVN = -10.000	
ZREF = 474.6300 IN.						A-ELVN = -10.000	MACH = .900	
SCALE = 936.0686 IN.								
$\alpha_{\text{PA}} (1) = -3.998$	$\beta_{\text{TA}} (1) = -3.854$	$\text{MACH} = .90080$	$\theta = 0$	$P = 600.60$	$\text{RN/L} = 1057.3$			
SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP							
Z'BV	.7170	.4120	.5070	.6020	.6970	.7920		
X'CV								
.708	-.4210	-.4530	-.5038	-.5195	-.4893	-.4018		
.757	-.4323	-.4549	-.5178	-.5428	-.0000	-.4025		
.805	-.4468	-.4753	-.5356	-.5435	-.4832	-.3951		
.857	-.4667	-.5153	-.5577	-.5544	-.4737	-.3835		
.909	-.4937	-.5613	-.5663	-.5392	-.4639	-.3764		
$\alpha_{\text{PA}} (2) = -3.915$	$\beta_{\text{TA}} (2) = .189$	$\text{MACH} = .90080$	$\theta = 0$	$P = 600.60$	$\text{RN/L} = 1057.3$			
SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP							
Z'BV	.3170	.4120	.5070	.6020	.6970	.7920		
X'CV								
.739	-.4238	-.4354	-.4840	-.5251	-.4897	-.4164		
.757	-.4233	-.4487	-.5065	-.5341	.0000	-.4191		
.825	-.4378	-.4670	-.5244	-.5324	-.4916	-.4155		
.887	-.4549	-.4993	-.5421	-.5355	-.4766	-.4129		
.959	-.4933	-.5300	-.5538	-.5300	-.4824	-.4034		
$\alpha_{\text{PA}} (3) = -3.961$	$\beta_{\text{TA}} (3) = .4266$	$\text{MACH} = .90080$	$\theta = 0$	$P = 600.60$	$\text{RN/L} = 1057.3$			
SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP							
Z'BV	.3170	.4120	.5070	.6020	.6970	.7920		
X'CV								
.728	-.4976	-.5254	-.5716	-.6205	-.5635	-.4601		
.757	-.5083	-.5287	-.6010	-.6295	.0000	-.4544		
.825	-.5173	-.5500	-.6318	-.6250	-.5483	-.4496		
.887	-.5541	-.5910	-.6551	-.6330	-.5403	-.4421		
.959	-.5756	-.6395	-.6689	-.6096	-.5291	-.4312		

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(OAI4B) -140A/B/C ORB SPEED BRAKE
 $\alpha_{\text{RIGHT}} + \beta_1 = .055$ $\text{BETA } (1) = -3.868$ MACH = .90127 0 = 600.67 P = 1056.4 RNL = 3.5726

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .728 -.4625 -.4758 -.5302 -.5729 -.5347 -.4188
 .757 -.4537 -.4872 -.5570 -.5817 -.5000 -.4195
 .625 -.4615 -.5073 -.5793 -.5822 -.5228 -.4133
 .687 -.5057 -.5422 -.6062 -.5760 -.5128 -.4051
 .368 -.5193 -.5844 -.6249 -.5708 -.4931 -.3956

$\alpha_{\text{RIGHT}} + \beta_1 = .084$ $\text{BETA } (2) = .180$ MACH = .90127 0 = 600.67 P = 1056.4 RNL = 3.5726

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .728 -.4534 -.4716 -.5103 -.5497 -.5307 -.4426
 .757 -.4557 -.4776 -.5357 -.5683 -.5000 -.4397
 .625 -.4716 -.4892 -.5654 -.5692 -.5255 -.4319
 .687 -.4325 -.5313 -.5765 -.5726 -.5205 -.4224
 .368 -.5234 -.5561 -.5928 -.5707 -.5051 -.4122

$\alpha_{\text{RIGHT}} + \beta_1 = .055$ $\text{BETA } (3) = 4.248$ MACH = .90127 0 = 600.67 P = 1056.4 RNL = 3.5726

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .5338 -.5055 -.5030 -.6286 -.5783 -.4485
 .5143 -.5251 -.5255 -.6450 -.0000 -.4345
 .5043 -.5361 -.5353 -.6545 -.5468 -.4307
 .687 -.5773 -.6271 -.5714 -.6455 -.5432 -.4237
 .368 -.6234 -.6753 -.6970 -.6277 -.5449 -.4063

$\alpha_{\text{RIGHT}} + \beta_1 = -4.001$ $\text{BETA } (4) = -3.875$ MACH = .90140 0 = 601.01 P = 1056.6 RNL = 3.5771

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .3170 .4120 .5070 .6020 .5970 .7920

X/CY
 .728 -.4618 -.4940 -.5520 -.5897 -.5322 -.4066
 .757 -.4887 -.4578 -.5895 -.6081 -.0000 -.4080
 .625 -.4845 -.5245 -.5109 -.6090 -.5284 -.4068
 .687 -.5153 -.5553 -.5374 -.6054 -.5141 -.3751
 .368 -.5522 -.6151 -.6515 -.5959 -.4972 -.3634

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(XEBK74)

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

		AMES 11-073(DA14B) - 140A/B/C		ORB SPEED BRAKE	(XEBCT4)	
SECTION 1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP				
Z/B	.3170	.4120	.5070	.6020	.6970	.7920
X/CP						
.753	-.4541	-.4838	-.5334	-.5636	-.5348	-.4415
.757	-.4619	-.4921	-.5516	-.5719	-.0000	-.4362
.805	-.4738	-.5042	-.5716	-.5771	-.5279	-.4367
.887	-.5055	-.5420	-.6037	-.5776	-.5191	-.4207
.958	-.5337	-.5869	-.6063	-.5688	-.5089	-.4093
ALPHA (3) = 4.079 BETA (2) = .183 MACH = .90140 Q = 601.01 P = 1056.6 RNL = 3.5771						
SECTION 1) RIGHT HAND INSIDE						
Z/B	.3170	.4120	.5070	.6020	.6970	.7920
X/CP						
.758	-.5007	-.5407	-.6101	-.6285	-.5604	-.4421
.767	-.5038	-.5495	-.6507	-.6457	-.0000	-.4303
.825	-.5256	-.5815	-.6720	-.6433	-.5507	-.4236
.857	-.5777	-.6393	-.6925	-.6402	-.5310	-.4101
.933	-.6115	-.6722	-.6952	-.6324	-.5106	-.3831
ALPHA (4) = 7.933 BETA (1) = -3.872 MACH = .90130 Q = 600.85 P = 1056.6 RNL = 3.5771						
SECTION 1) RIGHT HAND INSIDE						
Z/B	.3170	.4120	.5070	.6020	.6970	.7920
X/CP						
.729	-.4925	-.5139	-.5701	-.6162	-.5663	-.4224
.757	-.4943	-.5119	-.6391	-.6319	-.0000	-.4136
.835	-.5244	-.5304	-.6285	-.6350	-.5478	-.4143
.887	-.5382	-.5357	-.6713	-.6295	-.5302	-.3901
.959	-.5706	-.6447	-.6634	-.6328	-.4993	-.3749
ALPHA (4) = 8.023 BETA (2) = .177 MACH = .90130 Q = 600.85 P = 1056.6 RNL = 3.5771						
SECTION 1) RIGHT HAND INSIDE						
Z/B	.3170	.4120	.5070	.6020	.6970	.7920
X/CP						
.728	-.4598	-.5000	-.5630	-.5884	-.5483	-.4340
.757	-.4649	-.5099	-.5257	-.6026	-.0000	-.4349
.835	-.4770	-.5253	-.6071	-.6012	-.5232	-.4176
.887	-.5211	-.5757	-.6392	-.6019	-.5177	-.4037
.958	-.5505	-.6189	-.6477	-.5935	-.5004	-.3956

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TAGPLATED PRESSURE DATA - 0A148 (ANES 11-073-1)

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SECTION 1: RIGHT HAND INSIDE		ANES 11-07310A148) -1140A/B/C		ORB SPEED BRAKE		INERTIA	
SECTION 1: RIGHT HAND INSIDE		DEPENDENT VARIABLE CP					
Z/B:	.31172	.4123	.5070	.6020	.6970	.7920	
A/CY							
.729	-.5247	-.5515	-.6445	-.6519	-.5807	-.4363	
.757	-.5203	-.5681	-.5578	-.6635	.0000	.4377	
.605	-.5468	-.5933	-.6877	-.6571	-.5648	-.4270	
.687	-.5358	-.6566	-.7145	-.6448	-.5451	-.4035	
.708	-.6168	-.7035	-.7119	-.6360	-.5200	-.3878	
A/P4	51 =	11.390	BETA 1 1) =	-3.859	MACH =	.90157	
SECTION 1: RIGHT HAND INSIDE							
D-5:	.21170	.4123	.5070	.6020	.6970	.7920	
A/CY							
.729	-.5157	-.6478	-.6478	-.6478	-.5725	-.4287	
.757	-.6374	-.6374	-.6374	-.6374	.0000	.4283	
.605	-.6720	-.6720	-.6720	-.6720	-.5729	-.4207	
.687	-.6319	-.6319	-.6319	-.6319	-.5409	-.4054	
.708	-.6163	-.6163	-.6163	-.6163	-.5436	-.3807	
A/P4	51 =	11.397	BETA 1 2) =	.1E3	12CH =	.90157	
SECTION 1: RIGHT HAND INSIDE							
D-5:	.21170	.4123	.5070	.6020	.6970	.7920	
A/CY							
.729	-.5155	-.6327	-.5959	-.6220	-.5571	-.4376	
.757	-.6145	-.6145	-.6145	-.6145	.0000	.4316	
.605	-.6156	-.6156	-.6156	-.6156	-.5394	-.4217	
.687	-.6156	-.6156	-.6156	-.6156	-.5266	-.4104	
.708	-.6163	-.6163	-.6163	-.6163	-.5212	-.3986	
A/P4	51 =	12.354	BETA 1 3) =	.4256	MACH =	.90157	
SECTION 1: RIGHT HAND INSIDE							
D-5:	.21170	.4123	.5070	.6020	.6970	.7920	
A/CY							
.729	-.5156	-.6319	-.6653	-.6713	-.5879	-.4625	
.757	-.6145	-.6145	-.6145	-.6145	.0000	.4476	
.605	-.6153	-.6153	-.6153	-.6153	-.5655	-.4384	
.687	-.6153	-.6153	-.6153	-.6153	-.5546	-.4237	
.708	-.6169	-.6169	-.6169	-.6169	-.5392	-.4005	

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140AA/B/C ORB SPEED BRAKE

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(REFCTS: 113 AUG 75)

REFERENCE DATA

SOF = 1000.0000 52 FT. XWSP = 1076.6800 IN. X0
 LEEF = .47-.5100 IN. YWSP = .0000 IN. Y0
 BREF = 936.5660 IN. ZWSP = 375.0000 IN. Z0
 SCALE = .C300

$\Delta_{\text{PA}}(1) = -3.993 \quad \text{BETA } (1) = -7.854 \quad \text{MACH } = .59648 \quad Q = 594.32 \quad P = 2386.4 \quad RN/L = 4.8575$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

Y/CV .738 -.5601 -.6233 -.7076 -.6655 -.5340 -.3821

.757 -.5930 -.6351 -.7627 -.6963 -.0000 -.3764

.625 -.6031 -.6834 -.7696 -.6702 -.5110 -.3698

.657 -.6266 -.7421 -.7637 -.6596 -.5020 -.3544

.353 -.6955 -.8029 -.7535 -.6433 -.5188 -.3509

$\Delta_{\text{PA}}(1) = -3.939 \quad \text{BETA } (2) = -3.848 \quad \text{MACH } = .59648 \quad Q = 594.32 \quad P = 2386.4 \quad RN/L = 4.8576$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

Y/CV .738 -.5613 -.5329 -.6235 -.6030 -.5019 -.3530

.557 -.5082 -.5659 -.6559 -.6147 -.0000 -.3383

.205 -.5285 -.6022 -.5665 -.6158 -.4817 -.3354

.937 -.5919 -.6680 -.6872 -.6534 -.4649 -.3230

.358 -.6273 -.7134 -.6837 -.5841 -.4454 -.3019

$\Delta_{\text{PA}}(1) = -3.938 \quad \text{BETA } (3) = .187 \quad \text{MACH } = .59648 \quad Q = 594.32 \quad P = 2386.4 \quad RN/L = 4.8576$

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/3V .3170 .4120 .5070 .6020 .6970 .7920

Y/CV .728 -.5218 -.5538 -.6395 -.6030 -.5024 -.3543

.757 -.5091 -.5659 -.6684 -.6146 -.0000 -.3393

.805 -.5302 -.6245 -.6304 -.6143 -.4705 -.3296

.697 -.5859 -.6577 -.7051 -.6049 -.4631 -.3223

.358 -.6534 -.7239 -.6945 -.5783 -.4363 -.2916

PARAMETRIC DATA

RUDDER = -5.000 SPDBRK = 55.000
 BDFLAP = 16.300 L-ELVN = -10.000
 R-ELVN = -10.000 MACH = .600

RN/L = 4.8575

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C ORB SPEED BRAKE

$\alpha_{crit} (\gamma) = -3.925$ $\beta_{crit} (\gamma) = 4.265$ $MACH = .59648$ $Q = 594.32$ $P = 2386.4$ $RFL = 4.8576$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.728	-.5417	-.5952	-.6759	-.6236	-.5137	-.3538
.757	-.5498	-.6182	-.6993	-.6513	.0060	-.3483
.785	-.5755	-.6502	-.7081	-.6331	-.4959	-.3474
.813	-.6442	-.7029	-.7174	-.6278	-.4758	-.3198
.837	-.6795	-.7136	-.7265	-.5939	-.4395	-.2987

$\alpha_{crit} (\gamma) = -3.925$ $\beta_{crit} (\gamma) = 8.332$ $MACH = .59648$ $Q = 594.32$ $P = 2386.4$ $RFL = 4.8576$

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.728	-.6798	-.7779	-.6798	-.5005	-.3261	
.757	-.6976	-.7357	-.6976	-.3174		
.785	-.7363	-.7868	-.7363	-.3138	-.3264	
.813	-.7641	-.8141	-.7641	-.3152	-.3151	
.837	-.7883	-.8343	-.7883	-.3115	-.2754	

$\alpha_{crit} (\gamma) = -3.925$ $\beta_{crit} (\gamma) = 7.830$ $MACH = .59624$ $Q = 593.65$ $P = 2386.3$ $RFL = 4.8573$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.728	-.7761	-.7359	-.7761	-.5521	-.3227	
.757	-.7949	-.7623	-.7949	-.3202		
.785	-.8227	-.8123	-.8227	-.5195	-.2850	
.813	-.8405	-.8323	-.8405	-.4737	-.2504	
.837	-.8583	-.8423	-.8583	-.3116	-.2493	

$\alpha_{crit} (\gamma) = -3.925$ $\beta_{crit} (\gamma) = -3.262$ $MACH = .59624$ $Q = 593.65$ $P = 2386.3$ $RFL = 4.8573$

SECTION 1: LEFT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.728	-.8039	-.7839	-.8039	-.6374	-.3263	
.757	-.8227	-.7935	-.8227	-.6402	-.3251	
.785	-.8405	-.8135	-.8405	-.6432	-.3126	
.813	-.8583	-.8335	-.8583	-.6438	-.2963	
.837	-.8761	-.8535	-.8761	-.6462	-.2856	

X/CY

.728	-.8217	-.7915	-.8217	-.6574	-.34875	
.757	-.8395	-.8015	-.8395	-.6602	-.34000	
.785	-.8573	-.8115	-.8573	-.6631	-.31474	
.813	-.8751	-.8215	-.8751	-.6638	-.29126	
.837	-.8929	-.8315	-.8929	-.6662	-.27475	

X/CY

.728	-.8395	-.7993	-.8395	-.6742	-.3451	
.757	-.8573	-.8093	-.8573	-.6771	-.3251	
.785	-.8751	-.8193	-.8751	-.6800	-.3026	
.813	-.8929	-.8293	-.8929	-.6829	-.2803	
.837	-.9107	-.8393	-.9107	-.6858	-.2677	

X/CY

DATE : FEB 75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-0731(OA148) -140A/B/C ORB SPEED BRAKE

1XEB75)

A_P=2 = .21 = .022 BETA (3) = .181 MACH = .59324 0 = 593.85 P = 2386.3 RNL = 4.8579

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BI .3170 .4120 .5070 .6020 .6970 .7920

X_CV -.5327 -.5835 -.6931 -.6360 -.5098 -.3430

.751 -.5593 -.6369 -.7205 -.6557 .0000 -.3264

.635 -.5774 -.6763 -.7225 -.6172 -.4944 -.3245

.637 -.5273 -.7495 -.7303 -.6311 -.4572 -.3178

.368 -.6371 -.7517 -.7301 -.6529 -.4401 -.2805

A_P=2 = .077 BETA (4) = 4.247 MACH = .59324 0 = 593.85 P = 2386.3 RNL = 4.8579

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BI .3170 .4120 .5070 .6020 .6970 .7920

X_CV -.5752 -.6390 -.7076 -.6522 -.5064 -.3254

.757 -.5261 -.6444 -.7387 -.6486 .0000 -.3216

.635 -.6126 -.7572 -.7460 -.6512 -.4841 -.3163

.637 -.6759 -.7634 -.7527 -.6327 -.4628 -.3139

.563 -.7173 -.7327 -.7459 -.5834 -.4168 -.2763

ALPHA (2) = .073 BETA (5) = 8.305 MACH = .59324 0 = 593.85 P = 2386.3 RNL = 4.8579

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BI .3170 .4120 .5070 .6020 .6970 .7920

X_CV -.5532 -.7371 -.8176 -.5901 -.4848 -.2709

.757 -.6719 -.7734 -.8518 -.6991 .0000 -.2837

.635 -.7034 -.8597 -.8516 -.6840 -.4655 -.2674

.637 -.8149 -.9312 -.8528 -.6463 -.4220 -.2557

.563 -.8453 -.9141 -.7939 -.5639 -.3811 -.2423

A_P=2 = 4.223 BETA (1) = -7.904 MACH = .59324 0 = 593.85 P = 2386.5 RNL = 4.8639

SECTION : 1)RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z_BY .3170 .4120 .5070 .6020 .6970 .7920

X_CV -.7230 -.7769 -.9151 -.8098 -.5665 -.3075

.757 -.7254 -.7395 -.9169 -.8218 .0000 -.2992

.635 -.7753 -.8253 -.9276 -.7903 -.5452 -.3111

.637 -.7663 -.8523 -.9713 -.7557 -.4823 -.2881

.563 -.8243 -.9328 -.9457 -.7227 -.4455 -.2547

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C ORB SPEED BRAKE (XEBK75)							
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY	.708	-.5591	-.6207	-.7166	-.6288	-.4560	-.2614
	.757	-.5692	-.6451	-.7407	-.6527	.0000	.2510
	.805	-.5639	-.6975	-.7741	-.6328	-.1409	-.2501
	.857	-.6463	-.7900	-.7848	-.5994	-.3952	-.2579
	.958	-.7187	-.8247	-.7478	-.5613	-.3688	-.2363
ALPHA : 3) = 4.153 BETA : 3) = .177 MACH = .59640 Q = .594.21 P = .2386.5 RNL = 4.8659							
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY	.708	-.5514	-.6035	-.7009	-.6569	-.5243	-.3469
	.757	-.5548	-.6146	-.7140	-.6616	.0000	.3356
	.805	-.5858	-.6749	-.7393	-.6647	-.5077	-.3138
	.857	-.6458	-.7272	-.7530	-.6453	-.4829	-.3146
	.958	-.6927	-.7690	-.7493	-.6095	-.4570	-.2888
ALPHA : 3) = 4.012 BETA : 4) = 4.240 MACH = .59640 Q = .594.21 P = .2386.5 RNL = 4.8659							
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY	.708	-.5622	-.6229	-.7124	-.6238	-.4491	-.2635
	.757	-.5781	-.6493	-.7330	-.6269	.0000	.2680
	.805	-.5990	-.7033	-.7422	-.6184	-.4240	-.2838
	.857	-.5530	-.7544	-.7510	-.5073	-.3868	-.2820
	.958	-.7277	-.7653	-.7397	-.5421	-.3650	-.2500
ALPHA : 3) = 4.017 BETA : 5) = 8.288 MACH = .59640 Q = .594.21 P = .2386.5 RNL = 4.8659							
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920	
X/CY	.708	-.5852	-.7552	-.8723	-.7223	-.4893	-.2947
	.757	-.6325	-.8391	-.8765	-.7351	.0000	.2736
	.805	-.7193	-.9089	-.9946	-.7062	-.4643	-.2760
	.857	-.9307	-.9547	-.8683	-.6573	-.4364	-.2629
	.958	-.8725	-.9345	-.8148	-.5955	-.3798	-.2479

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C ORB SPEED BRAKE

$$\text{ALPHA} (4) = 7.959 \quad \text{BETA} (1) = -7.893 \quad \text{MACH} = .59626 \quad 0 = 593.97 \quad P = 2386.7 \quad RN/L = 4.8657$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.6615 -.7183 -.8466 -.7054 -.4561 -.2655

.757 -.6569 -.7432 -.8561 -.7109 .0000 -.2544

.805 -.6759 -.8105 -.8633 -.6687 -.4485 -.2499

.887 -.7305 -.8929 -.8795 -.6514 -.3876 -.2378

.968 -.8091 -.9053 -.8871 -.6227 -.3634 -.2420

$$\text{ALPHA} (4) = 7.971 \quad \text{BETA} (2) = -3.863 \quad \text{MACH} = .59626 \quad 0 = 593.97 \quad P = 2386.7 \quad RN/L = 4.8657$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.5498 -.5982 -.7174 -.6324 -.4622 -.2616

.757 -.5575 -.6245 -.7387 -.6487 .1700 -.2538

.805 -.5762 -.6851 -.7673 -.6364 -.4058 -.2568

.887 -.6370 -.7511 -.7619 -.5971 .3710 -.2385

.958 -.7112 -.8262 -.7429 -.5512 -.3584 -.2336

$$\text{ALPHA} (4) = 8.077 \quad \text{BETA} (3) = .178 \quad \text{MACH} = .59626 \quad 0 = 593.97 \quad P = 2386.7 \quad RN/L = 4.8657$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5380 -.5866 -.6869 -.6500 -.5265 -.3550

.757 -.5458 -.6009 -.7065 -.6734 .0000 -.3578

.805 -.5699 -.6690 -.7252 -.6651 -.5024 -.3377

.887 -.6237 -.7118 -.7496 -.6452 -.4787 -.3210

.968 -.6742 -.7630 -.7453 -.6284 -.4584 -.2996

$$\text{ALPHA} (4) = 8.079 \quad \text{BETA} (4) = 4.235 \quad \text{MACH} = .59626 \quad 0 = 593.97 \quad P = 2386.7 \quad RN/L = 4.8657$$

SECTION 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.5570 -.6064 -.6897 -.6211 -.4665 -.2881

.757 -.5631 -.6270 -.7131 -.6447 .0000 -.2669

.805 -.5875 -.6730 -.7269 -.6291 -.4457 -.2947

.887 -.6513 -.7215 -.7387 -.6014 -.4114 -.2714

.968 -.7097 -.7704 -.7314 -.5673 -.3650 -.2588

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (4) = 8.076 BETA (5) = 8.290 MACH = .59626 Q = 593.97 P = 2386.7 RN/L = 4.8657
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.708 -.6382 -.7195 -.8010 -.6682 -.4317 -.2698

.757 -.6577 -.7598 -.8186 -.6566 .0000 -.2702

.805 -.6883 -.8371 -.9376 -.6471 -.4061 -.2674

.897 -.7854 -.8768 -.8028 -.6074 -.3952 -.2624

.959 -.8368 -.8643 -.7567 -.5330 -.3455 -.2507

ALPHA (5) = 11.984 BETA (1) = -7.850 MACH = .59636 Q = 594.09 P = 2386.3 RN/L = 4.8671
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.6410 -.7051 -.8220 -.6984 -.4652 -.2536

.557 -.6412 -.7300 -.8386 -.7059 .0000 -.2596

.605 -.6544 -.7930 -.8626 -.6851 -.4307 -.2383

.687 -.7014 -.8531 -.8817 -.6690 -.4077 -.2365

.669 -.7863 -.9065 -.9495 -.6368 -.3971 -.2434

ALPHA (5) = 12.003 BETA (2) = -3.840 MACH = .59636 Q = 594.09 P = 2386.3 RN/L = 4.8671
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.708 -.5778 -.6937 -.6258 -.4833 -.3047

.757 -.5510 -.5325 -.7051 -.6291 .0000 -.3043

.665 -.5573 -.6405 -.7312 -.6431 -.4493 -.3026

.391 -.6186 -.7243 -.7324 -.6149 -.4360 -.2777

.369 -.6755 -.7593 -.7234 -.5826 -.4011 -.2511

ALPHA (5) = 12.006 BETA (3) = .180 MACH = .59636 Q = 594.09 P = 2386.3 RN/L = 4.8671
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.708 -.5624 -.6059 -.7031 -.6632 -.5269 -.3473

.757 -.5353 -.6025 -.7378 -.6737 .0000 -.3375

.655 -.5336 -.5710 -.7557 -.6803 -.5138 -.3323

.587 -.5347 -.7142 -.7506 -.6499 -.4701 -.3110

.562 -.054 -.7750 -.7625 -.6171 -.4383 -.3390

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6509

AMES 11-073(OA14B) -1404/B/C ORB SPEED BRAKE

ALPHA (5) = 12.057 BETA (4) = 4.244 MACH = .59636 Q = 594.09 P = 2386.3 RN/L = 4.8671

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.709	-.5432	-.6011	-.7083	-.6427	-.4877	-.2927
.757	-.6230	-.7202	-.6540	-.0000	-.3041	
.805	-.5907	-.6822	-.7372	-.6550	-.4662	-.2913
.857	-.6519	-.7545	-.7431	-.6254	-.4318	-.2788
.958	-.7154	-.7828	-.7301	-.5929	-.3712	-.2577

ALPHA (5) = 12.114 BETA (5) = 8.307 MACH = .59636 Q = 594.09 P = 2386.3 RN/L = 4.8671

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.6383	-.6959	-.7758	-.6609	-.4838	-.2903
.757	-.6512	-.7347	-.7874	-.6716	-.0000	-.2842
.805	-.5559	-.7859	-.7902	-.6624	-.4360	-.2866
.887	-.7384	-.8288	-.7879	-.6245	-.4121	-.2890
.958	-.7887	-.8286	-.7490	-.5759	-.3713	-.2738

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-07310A148) -140A/B/C ORB SPEED BRAKE

(XERK76) (13 AUG 75)

REFERENCE DATA

SREF = 2630.0000 SCFT. XMRP = 1076.6800 IN. XO
 SPEC = 474.8550 IN. YMRP = .0000 IN. YO
 BREF = 535.0680 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0300

ALPHA (1) = -4.004 BETA (1) = -3.853 MACH = 1.3930 P = 598.57 RN/L = 440.65

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .709 -.2756 -.2923 -.2956 -.2394 -.2411 -.3375
 .757 -.3303 -.3110 -.3196 -.3463 .0000 -.3370
 .825 -.3427 -.3301 -.3418 -.3605 -.3535 -.3385
 .887 -.3843 -.3718 -.3751 -.3877 -.3684 -.3416
 .959 -.4268 -.4199 -.4322 -.4337 -.4136 -.3839

ALPHA (1) = -4.001 BETA (2) = .191 MACH = 1.3930 P = 598.57 RN/L = 440.65

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .709 -.2729 -.2987 -.2900 -.3330 -.3352 -.3323
 .757 -.3329 -.3056 -.3117 -.3409 .0000 -.3316
 .825 -.3458 -.3262 -.3342 -.3538 -.3474 -.3312
 .887 -.3921 -.3652 -.3653 -.3901 -.3619 -.3386
 .959 -.4311 -.4057 -.4220 -.4267 -.4081 -.3837

ALPHA (1) = -3.383 BETA (3) = 4.275 MACH = 1.3930 P = 598.57 RN/L = 440.65

SECTION : (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .709 -.2572 -.2756 -.2752 -.3255 -.3284 -.3267
 .757 -.3046 -.2941 -.2987 -.3200 .0000 -.3260
 .825 -.3151 -.3137 -.3217 -.3452 -.3392 -.3260
 .887 -.3654 -.3526 -.3540 -.3711 -.3517 -.3285
 .959 -.4341 -.3974 -.4130 -.4190 -.3900 -.3641

PARAMETRIC DATA

RUDDER = -10.000 SPDBRK = 0.000
 BDFLAP = -11.700 L-ELVN = 10.000
 R-ELVN = -10.000 MACH = 1.400

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

		AMES 11-073(0A148)		-140A/B/C		ORB SPEED BRAKE		(XEBK76)	
ALPHA : 2) =	.029	BETA (1) =	-3.866	MACH =	1.3913	O =	.598.64	P =	441.83
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CY									
.759	-.2863	-.3031	-.3058	-.3623	-.3686	-.3686			
.757	-.3423	-.3227	-.3288	-.3700	.0000	.3676			
.625	-.3521	-.3435	-.3551	-.3927	-.3803	-.3686			
.687	-.3935	-.3821	-.3925	-.4100	-.3944	-.3716			
.958	-.4409	-.4387	-.4567	-.4581	-.4392	-.4099			
ALPHA : 2) = .023	BETA (2) =	.181	MACH = 1.3913	O =	.598.64	P = 441.83	RNL = 2.9093		
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CY									
.758	-.2799	-.2974	-.2987	-.3542	-.3600	-.3576			
.757	-.3395	-.3158	-.3224	-.3612	.0300	.3583			
.605	-.3505	-.3355	-.3963	-.3736	-.3710	-.3600			
.987	-.3946	-.3768	-.3813	-.4000	-.3844	-.3667			
.958	-.4422	-.4219	-.4418	-.4478	-.4296	-.4096			
ALPHA : 2) = .023	BETA (3) = .255	MACH = 1.3913	O =	.598.64	P = 441.83	RNL = 2.9093			
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CY									
.708	-.2769	-.2862	-.2899	-.3473	-.3576	-.3575			
.757	-.3218	-.3070	-.3136	-.3545	.0000	.3552			
.605	-.3328	-.3273	-.3382	-.3650	-.3664	-.3564			
.667	-.3737	-.3693	-.3724	-.3917	-.3772	-.3612			
.958	-.4514	-.4191	-.4340	-.4407	-.4166	-.3937			
ALPHA : 3) = 3.961	BETA (1) = -3.871	MACH = 1.3919	O =	.599.88	P = 442.29	RNL = 2.9174			
SECTION (1) RIGHT HAND INSIDE		DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920			
X/CY									
.757	-.2756	-.2961	-.3045	-.3768	-.3919	-.3905			
.955	-.3093	-.3132	-.3307	-.3855	.0000	.3926			
.617	-.3193	-.3336	-.3582	-.3972	-.4034	-.3946			
.252	-.2634	-.2781	-.3989	-.4254	-.4165	-.3994			
	-.253	-.4409	-.4577	-.4732	-.4610	-.4363			

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (3) = 3.962 BETA (2) = .187 MACH = 1.3919 0 = 599.88 P = 442.29 RN/L = 2.9174

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.2904	-.3056	-.3070	-.3723	-.3840	-.3818
.757	-.3438	-.3247	-.3327	-.3790	.0000	-.3830
.805	-.3570	-.3445	-.3563	-.3914	-.3945	-.3859
.887	-.3963	-.3831	-.3928	-.4178	-.4076	-.3905
.958	-.4517	-.4204	-.4574	-.4658	-.4498	-.4302

ALPHA (3) = 3.963 BETA (3) = .246 MACH = 1.3919 0 = 599.88 P = 442.29 RN/L = 2.9174

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.2877	-.3044	-.3054	-.3592	-.3817	-.3800
.757	-.3453	-.3233	-.3293	-.3740	.0000	-.3814
.805	-.3552	-.3483	-.3533	-.3948	-.3903	-.3828
.887	-.4527	-.4227	-.3853	-.4096	-.4022	-.3874
.958	-.4673	-.4279	-.4421	-.4546	-.4385	-.4181

ALPHA (4) = 7.857 BETA (1) = -.3865 MACH = 1.3932 0 = 600.00 P = 441.59 RN/L = 2.9153

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.2545	-.2789	-.2909	-.3877	-.4104	-.4083
.757	-.2775	-.2940	-.3181	-.3908	.0000	-.4111
.805	-.2216	-.3148	-.3458	-.4040	-.4197	-.4150
.887	-.3142	-.3628	-.3699	-.4346	-.4339	-.4205
.958	-.3975	-.4260	-.4658	-.4822	-.4767	-.4549

ALPHA (4) = 7.354 BETA (2) = .189 MACH = 1.3932 0 = 600.00 P = 441.59 RN/L = 2.9153

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-.2572	-.2919	-.3025	-.3893	-.4060	-.4036
.757	-.3352	-.3222	-.3347	-.2922	.0000	-.4065
.805	-.2425	-.3432	-.3606	-.4039	-.4151	-.4103
.887	-.3241	-.3931	-.3250	-.4302	-.4273	-.4146
.958	-.4391	-.4269	-.4592	-.4759	-.4663	-.4524

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TABULATED PRESSURE DATA - OA1481 AMES 11-073-1

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AMES 11-073(OA1481)-1400A/B/C ORB SPEED BRAKE
 ALPHAS = 7.951 BETA (3) = 4.247 MACH = 1.3932 0 = 600.00 P = 441.59 RN/L = 2.9153
 SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.3054 -.3239 -.3265 -.3925 -.4059 -.4042
 .757 -.3788 -.3442 -.3492 -.3966 .0000 -.4052
 .655 -.3949 -.3633 -.3733 -.4076 -.4143 -.4085
 .637 -.4505 -.4111 -.4052 -.4298 -.4260 -.4138
 .563 -.5013 -.4516 -.4563 -.4704 -.4602 -.4420

ALPHA (5) = 11.871 BETA (1) = -3.849 MACH = 1.3930 0 = 600.10 P = 441.82 RN/L = 2.9227
 SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.2624 -.2861 -.2969 -.4009 -.4296 -.4294
 .757 -.2803 -.2937 -.3237 -.4040 .0000 -.4318
 .655 -.2624 -.3205 -.3543 -.4157 -.4389 -.4365
 .697 -.3183 -.3659 -.3983 -.4463 -.4516 -.4405
 .563 -.4539 -.4367 -.4793 -.4937 -.4889 -.4721

ALPHA (5) = 11.913 BETA (2) = -.191 MACH = 1.3930 0 = 600.10 P = 441.82 RN/L = 2.9227
 SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.2945 -.3124 -.3173 -.4042 -.4267 -.4257
 .757 -.3435 -.3287 -.3417 -.4085 .0000 -.4269
 .655 -.3493 -.3481 -.3678 -.4188 -.4345 -.4308
 .497 -.3549 -.3926 -.4040 -.4425 -.4469 -.4371
 .563 -.4478 -.4427 -.4676 -.4901 -.4837 -.4733

ALPHA (5) = 11.938 BETA (3) = 4.262 MACH = 1.3930 0 = 600.10 P = 441.82 RN/L = 2.9227
 SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
 .708 -.3265 -.3261 -.3283 -.4017 -.4203 -.4191
 .757 -.3523 -.3474 -.3522 -.4045 .0000 -.4210
 .655 -.4059 -.4594 -.3766 -.4127 -.4280 -.4237
 .563 -.4564 -.4140 -.4562 -.4318 -.4371 -.4291
 .563 -.5046 -.4581 -.4582 -.4645 -.4691 -.4542

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (6) = 15.905 BETA (1) = -3.830 MACH = 1.3921 0 = 600.28 P = 442.53 RNL = 2.9208

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
.709 -.2836 -.3055 -.3171 -.4187 -.4472 -.4462
.757 -.3089 -.3223 -.3422 -.4216 .0000 -.4501
.805 -.3187 -.3407 -.3695 -.4340 -.4563 -.4537
.887 -.3514 -.3876 -.4147 -.4637 -.4680 -.4617
.968 -.4324 -.4546 -.4921 -.5091 -.5039 -.4919

ALPHA (6) = 15.917 BETA (2) = .190 MACH = 1.3921 0 = 600.28 P = 442.53 RNL = 2.9208

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
.709 -.3125 -.3358 -.3373 -.4226 -.4447 -.4468
.757 -.3583 -.3547 -.3662 -.4284 .0000 -.4487
.805 -.3298 -.3755 -.3906 -.4413 -.4545 -.4523
.867 -.4224 -.4165 -.4279 -.4674 -.4657 -.4605
.968 -.4791 -.4777 -.4842 -.5107 -.5006 -.4902

ALPHA (6) = 15.907 BETA (3) = .4290 MACH = 1.3921 0 = 600.28 P = 442.53 RNL = 2.9208

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY
.709 -.3339 -.3504 -.3553 -.4288 -.4463 -.4432
.757 -.3062 -.3719 -.3735 -.4314 .0000 -.4460
.805 -.3370 -.3844 -.4025 -.4401 -.4530 -.4496
.867 -.4636 -.4331 -.4336 -.4642 -.4626 -.4525
.968 -.5279 -.5272 -.5238 -.5221 -.4961 -.4762

AMES 11-073(0A148) -140A/B/C ORB SPEED BRAKE

(XEBK76)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C ORB SPEED BRAKE

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(XEBK77) (13 AUG 75)

REFERENCE DATA

SEEF	2693.0000 SQ.FT.	XMP	=	1076.6800 IN. X0	
REF	.471.8500 IN.	YMP	=	.0000 IN. Y0	
SREF	.536.3590 IN.	ZMP	=	.375.0000 IN. Z0	
SCALE	.0320				

ALPHA (1) = -4.016 BETA (1) = -3.849 MACH = 1.2454

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .709 -.3064 -.3321 -.3425 -.4267 -.4413 -.4366

.757 -.3549 -.3505 -.3686 -.4327 .0000 -.4387

.805 -.3593 -.3749 -.3995 -.4480 -.4550 -.4423

.857 -.4059 -.4251 -.4456 -.4830 -.4722 -.4474

.903 -.4762 -.4919 -.5225 -.5428 -.5251 -.4987

ALPHA (1) = -4.011 BETA (2) = .186 MACH = 1.2454

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3035 -.3262 -.3311 -.4155 -.4342 -.4320

.757 -.3521 -.3442 -.3575 -.4205 .0000 -.4327

.805 -.3578 -.2562 -.3836 -.4511 -.4464 -.4366

.857 -.4093 -.4279 -.4215 -.4615 -.4613 -.4420

.903 -.4859 -.4539 -.4821 -.5155 -.5135 -.4930

ALPHA (1) = -4.020 BETA (3) = 4.275 MACH = 1.2454

SECTION 1 : RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2776 -.3230 -.3110 -.3985 -.4167 -.4128

.757 -.3140 -.3243 -.3409 -.4025 .0000 -.4164

.805 -.3241 -.3471 -.3580 -.4152 -.4255 -.4174

.857 -.3835 -.3923 -.4083 -.4418 -.4375 -.4235

.903 -.4692 -.4593 -.4739 -.4936 -.4809 -.4602

PARAMETRIC DATA

RUDDER	= -10.000	SPDBRK	= .000
BDFLAP	= -11.700	L-ELVN	= 10.000
R-ELVN	= -10.000	MACH	= 1.250

RN/L = 3.0204

RN/L = 3.0204

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C ORB SPEED BRAKE

(XEBK77) 3.0183

ALPHA = 21 = .012 BETA (1) = -3.863 MACH = 1.2451 0 = 599.58 P = 552.51 RNL = 3.0183

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV -.758 -.2930 -.3260 -.3304 -.4412 -.4675 -.4656
-.757 -.3289 -.3385 -.3615 -.4452 -.4800 -.4682
.825 -.3366 -.3617 -.3947 -.4584 -.4802 -.4723
.827 -.3789 -.4112 -.4414 -.4933 -.4957 -.4792
.923 -.4564 -.4763 -.5228 -.5520 -.5467 -.5271

ALPHA = 21 = .014 BETA (2) = .176 MACH = 1.2451 0 = 599.58 P = 552.51 RNL = 3.0183

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV -.729 -.2758 -.3205 -.3365 -.4353 -.4595 -.4586
.757 -.3532 -.3506 -.3643 -.4372 -.4706 -.4622
.825 -.3835 -.3822 -.3921 -.4493 -.4809 -.4655
.827 -.4124 -.4183 -.4317 -.4770 -.4849 -.4741
.923 -.4934 -.4933 -.4953 -.5262 -.5348 -.5240

ALPHA = 21 = .025 BETA (3) = .4255 MACH = 1.2451 0 = 599.58 P = 552.51 RNL = 3.0183

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV -.758 -.2971 -.3229 -.3285 -.4271 -.4525 -.4509
.757 -.3295 -.3623 -.3570 -.4289 -.4600 -.4525
.825 -.3774 -.3584 -.3854 -.4005 -.4603 -.4553
.827 -.4074 -.4620 -.4620 -.4718 -.4718 -.4632
.923 -.5123 -.4874 -.4973 -.5166 -.5127 -.5011

ALPHA = 21 = .397 BETA (4) = -3.868 MACH = 1.2451 0 = 599.58 P = 552.51 RNL = 3.0187

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z-BY .3170 .4120 .5070 .6020 .6970 .7920

X-CV -.758 -.2819 -.3138 -.3267 -.4536 -.4924 -.4919
.757 -.3037 -.3239 -.3586 -.4539 -.0000 -.4959
.825 -.3109 -.3192 -.3562 -.4680 -.5025 -.4961
.827 -.3535 -.4034 -.4379 -.5037 -.5183 -.5080
.923 -.4493 -.4726 -.5187 -.5573 -.5681 -.5528

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(DA14B) - 140A/B/C CRB SPEED BRAKE

(XEC77)

ALPHA = 31 = 3.289 BETA (2) = .182 MACH = 1.2451 Q = 599.58 P = 552.51 RVL = 3.0187

SECTION: 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.729	-.3094	-.3309	-.3386	-.4470	-.4832	-.4817
.757	-.3455	-.3501	-.3700	-.4479	-.4830	-.4838
.805	-.3534	-.3723	-.3957	-.4570	-.4913	-.4999
.887	-.3937	-.4201	-.4352	-.4896	-.5040	-.4988
.958	-.4632	-.4791	-.4949	-.5261	-.5467	-.5458

ALPHA + 31 = 3.988 BETA (3) = 4.246 MACH = 1.2451 Q = 599.58 P = 552.51 RVL = 3.0187

SECTION: 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.718	-.3225	-.3483	-.3512	-.4523	-.4794	-.4806
.757	-.3765	-.3703	-.3814	-.4535	-.4900	-.4830
.805	-.3827	-.3950	-.4120	-.4631	-.4869	-.4864
.887	-.4117	-.4487	-.4480	-.4869	-.4967	-.4933
.958	-.5358	-.5154	-.5058	-.5209	-.5302	-.5224

ALPHA + 41 = 7.974 BETA (1) = -3.859 MACH = 1.2449 Q = 599.64 P = 552.75 RVL = 3.0238

SECTION: 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .70 .4120 .5070 .6020 .6970 .7920

X/CY

.728	-.2771	-.3101	-.3220	-.4621	-.5114	-.5131
.757	-.2938	-.3252	-.3555	-.4619	-.5000	-.5169
.805	-.3039	-.3465	-.3867	-.4738	-.5203	-.5217
.887	-.3429	-.3973	-.4384	-.5086	-.5351	-.5319
.958	-.4452	-.4650	-.5172	-.5593	-.5833	-.5722

ALPHA + 41 = 7.979 BETA (2) = .184 MACH = 1.2449 Q = 599.64 P = 552.75 RVL = 3.0238

SECTION: 1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY

.708	-.3016	-.3290	-.3392	-.4587	-.5016	-.5033
.757	-.3228	-.3538	-.3665	-.4560	-.5000	-.5059
.805	-.3262	-.3516	-.4011	-.4689	-.5071	-.5114
.887	-.3781	-.4163	-.4416	-.4918	-.5181	-.5186
.958	-.4723	-.4692	-.5033	-.5251	-.5534	-.5585

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TABELATED PRESSURE DATA - OA14B (AMES 11-073) (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C ORB SPEED BRAKE

(XEBK77)

ALPHA (4) = 7.978 BETA (3) = 4.242 MACH = 1.2449 Q = 599.64 P = 552.75 RVL = 3.0238

SECTION: 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.723	-1.3525	-1.3719	-1.3760	-1.4725	-1.5044	-1.5042
.757	-1.4282	-1.2949	-1.4042	-1.4733	.0000	-1.5063
.805	-1.4313	-1.4210	-1.323	-1.826	-1.5085	-1.5104
.867	-1.4792	-1.4729	-1.4692	-1.5030	-1.5178	-1.5170
.958	-1.5555	-1.5300	-1.5212	-1.5236	-1.5449	-1.5417

ALPHA (4) = 11.361 BETA (3) = -1.847 MACH = 1.2454 Q = 599.63 P = 552.28 RVL = 3.0229

SECTION: 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.8	-1.2535	-1.3221	-1.352	-1.4779	-1.5325	-1.5377
.75	-1.3285	-1.3345	-1.3847	-1.4755	.0000	-1.5379
.70	-1.3111	-1.3525	-1.4553	-1.4892	-1.5383	-1.5433
.65	-1.3232	-1.323	-1.5243	-1.5536	-1.5509	-1.5536
.60	-1.3593	-1.3236	-1.5294	-1.5756	-1.5955	-1.5856

ALPHA (4) = 11.361 BETA (3) = 1.192 MACH = 1.2454 Q = 599.63 P = 552.28 RVL = 3.0229

SECTION: 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.8	-1.2170	-1.3389	-1.3459	-1.4706	-1.5193	-1.5212
.75	-1.3418	-1.3619	-1.3775	-1.4597	.0000	-1.5225
.70	-1.3691	-1.3772	-1.4072	-1.4795	-1.5226	-1.5291
.65	-1.3851	-1.4215	-1.4593	-1.5039	-1.5336	-1.5403
.60	-1.4762	-1.5052	-1.5126	-1.5360	-1.5635	-1.5744

ALPHA (4) = 11.361 BETA (3) = -1.260 MACH = 1.2454 Q = 599.63 P = 552.28 RVL = 3.0229

SECTION: 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-BV .3170 .4120 .5070 .6020 .6970 .7920

X/CP

.8	-1.2698	-1.3882	-1.3897	-1.4918	-1.5230	-1.5234
.75	-1.3335	-1.3535	-1.3721	-1.4611	.0000	-1.5263
.70	-1.3531	-1.3536	-1.4231	-1.4985	-1.5270	-1.5294
.65	-1.3639	-1.3639	-1.4321	-1.5150	-1.5326	-1.5336
.60	-1.3975	-1.3975	-1.5020	-1.5388	-1.5573	-1.5516

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TABULATED PRESSURE DATA - DATA 1 AMES 11-073-1

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AMES 11-073(CA148) -140A/B/C ORB SPEED BRAKE

(XEBK78) 1 13 AUG 75)

REFERENCE DATA

X _{CP}	=	2192.0000 IN.	X _{MRP} =	1076.6800 IN. X0
Z _{CP}	=	.7-.8600 IN.	Y _{MRP} =	.00000 IN. Y0
Z _{CP}	=	925.0000 IN.	Z _{MRP} =	375.0000 IN. Z0
SCALE	=	.3333		

A_{-P-A} (1) = -4.062 BETA (1) = -3.838 MACH = 1.0993 0 = 599.81 P = 709.06 RNU/L = 3.1886

SECTION 11 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-E/ .3170 .4120 .5070 .6020 .6970 .7920

X _{CP}	=	.2236	-2573	-3733	-5218	-5811	-5842
Z _{CP}	=	.3651	-3750	-4068	-5187	.0000	.5885
Z _{CP}	=	.3656	-4069	-4283	-5311	.5888	.5931
Z _{CP}	=	.4121	-4493	-4635	-5535	.6050	.6029
Z _{CP}	=	.5028	-5103	-5428	-6093	.6548	.6520

A_{-P-A} (1) = -4.368 BETA (2) = .195 MACH = 1.0993 0 = 599.81 P = 709.06 RNU/L = 3.1886

SECTION 11 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-E/ .3170 .4120 .5070 .6020 .6970 .7920

X _{CP}	=	.3255	-3612	-3697	-4994	-5468	-5454
Z _{CP}	=	.3517	-3383	-4013	-4982	.0000	.5506
Z _{CP}	=	.3565	-3545	-4343	-5092	.5523	.5547
Z _{CP}	=	.4289	-4514	-4767	-5252	.5235	.5633
Z _{CP}	=	.5322	-5237	-5420	-5607	.5992	.5875

A_{-P-A} (1) = -4.556 BETA (3) = 4.277 MACH = 1.0993 0 = 599.81 P = 709.06 RNU/L = 3.1886

SECTION 11 RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z-E/ .3170 .4120 .5070 .6020 .6970 .7920

X _{CP}	=	.3293	-3707	-3604	-5152	-5595	-5600
Z _{CP}	=	.3691	-3920	-4154	-5149	.0000	.5619
Z _{CP}	=	.3773	-4622	-4528	-5274	.5653	.5643
Z _{CP}	=	.4549	-4913	-5003	-5793	.5780	.5674
Z _{CP}	=	.5253	-5651	-5777	-6132	.6233	.5937

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -14DA/B/C ORB SPEED BRAKE

(XEC8678)

ALPHA (2) = .040 BETA (1) = -3.863 MACH = 1.0990 0 = 599.71 P = 709.30 RN/L = 3.1896

SECTION : !RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2941 -.3326 -.3496 -.5143 -.5901 -.5966

.757 -.3213 -.3502 -.3833 -.5057 -.0000 -.6011

.805 -.3287 -.3761 -.4201 -.5122 -.5882 -.6076

.887 -.3811 -.4322 -.4665 -.5425 -.6002 -.6208

.958 -.4856 -.5014 -.5351 -.5760 -.6372 -.6680

ALPHA (2) = .041 BETA (2) = -.186 MACH = 1.0990 0 = 599.71 P = 709.30 RN/L = 3.1896

SECTION : !RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3026 -.3409 -.3524 -.4974 -.5584 -.5620

.757 -.3402 -.3605 -.3859 -.4950 -.0000 -.5651

.805 -.3459 -.3859 -.4185 -.5055 -.5615 -.5687

.887 -.4035 -.4473 -.4639 -.5338 -.5730 -.5769

.958 -.5036 -.5263 -.5328 -.5732 -.6053 -.5948

ALPHA (2) = .035 BETA (3) = .4252 MACH = 1.0990 0 = 599.71 P = 709.30 RN/L = 3.1896

SECTION : !RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3169 -.3550 -.3695 -.5143 -.5691 -.5714

.757 -.3599 -.3824 -.4047 -.5088 -.0000 -.5774

.805 -.3581 -.4111 -.4413 -.5207 -.5722 -.5769

.887 -.4398 -.4771 -.4923 -.5504 -.5820 -.5789

.958 -.5720 -.5794 -.5847 -.5992 -.6231 -.5995

ALPHA (3) = .4.035 BETA (1) = -3.864 MACH = 1.0989 0 = 599.58 P = 709.30 RN/L = 3.1896

SECTION : !RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .718 -.2890 -.3335 -.3493 -.5227 -.6073 -.6169

.757 -.3175 -.3527 -.3848 -.5153 -.0000 -.6236

.805 -.3263 -.3788 -.4210 -.5244 -.6047 -.6284

.887 -.3877 -.4399 -.4655 -.5484 -.6090 -.6395

.958 -.4928 -.5151 -.5356 -.5742 -.6190 -.6651

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AMES 11-073(OA14B) - 140A/B/C ORB SPEED BRAKE
 (XEBK78)

ALPHA (3) = 4.004 BETA (2) = .194 MACH = 1.0989 Q = 599.58 P = 709.30 RN/L = 3.1896

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2995 -.3356 -.3503 -.5121 -.5856 -.5906

.757 -.3306 -.3545 -.3843 -.5064 -.0000 -.5954

.805 -.3359 -.3796 -.4165 -.5157 -.5866 -.592

.887 -.3861 -.4365 -.4647 -.5432 -.5947 -.6068

.969 -.4873 -.5179 -.5337 -.5765 -.6191 -.6142

ALPHA (3) = 4.004 BETA (3) = 4.242 MACH = 1.0989 Q = 599.58 P = 709.30 RN/L = 3.1896

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3096 -.3477 -.3654 -.5159 -.5751 -.5772

.757 -.3419 -.3695 -.3995 -.5106 -.0000 -.5803

.805 -.3498 -.3994 -.4349 -.5236 -.5772 -.5861

.887 -.4150 -.4627 -.4840 -.5466 -.5873 -.5884

.969 -.5474 -.5611 -.5513 -.5870 -.6165 -.6040

ALPHA (4) = 8.022 BETA (1) = -3.857 MACH = 1.1003 Q = 600.35 P = 708.37 RN/L = 3.1925

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2779 -.3255 -.3440 -.5266 -.6178 -.6329

.757 -.3002 -.3416 -.3797 -.5165 -.0000 -.6324

.805 -.3100 -.3708 -.4177 -.5295 -.6156 -.6422

.887 -.3727 -.4247 -.4899 -.5544 -.6132 -.6475

.968 -.4830 -.5127 -.5337 -.5805 -.6080 -.6605

ALPHA (4) = 8.002 BETA (2) = .186 MACH = 1.1003 Q = 600.35 P = 708.37 RN/L = 3.1925

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2928 -.3347 -.3509 -.5209 -.6028 -.6088

.757 -.3211 -.3524 -.3968 -.5139 -.0000 -.6133

.805 -.3275 -.3776 -.4215 -.5266 -.6026 -.6176

.887 -.3803 -.4359 -.4701 -.5537 -.6112 -.6226

.968 -.4838 -.5191 -.5350 -.5851 -.6310 -.6310

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C ORB SPEED BRAKE

(XEB78)

ALPHA (4) = 7.997 BETA (3) = 4.238 MACH = 1.003 0 = 600.35 P = 708.37 RNL = 3.1925
 SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3201 -.3604 -.3738 -.5186 -.5802 -.5911
 .757 -.3525 -.3773 -.4090 -.5146 -.0000 -.5952
 .805 -.3582 -.4025 -.4418 -.5246 -.5814 -.5905
 .857 -.4223 -.4626 -.4914 -.5543 -.5931 -.5926
 .908 -.5487 -.5414 -.5637 -.5996 -.6233 -.6127
 ALPHA (5) = 11.963 BETA (1) = -3.838 MACH = 1.0980 0 = 599.15 P = 710.01 RNL = 3.1917

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2996 -.3425 -.3608 -.5315 -.6207 -.6315
 .757 -.3205 -.3641 -.3941 -.5224 -.0000 -.6363
 .805 -.3320 -.3866 -.4320 -.5115 -.6118 -.6382
 .827 -.3941 -.4459 -.4783 -.5228 -.6085 -.6413
 .908 -.4952 -.5336 -.5389 -.5703 -.5878 -.6356
 ALPHA (5) = 11.967 BETA (2) = -.194 MACH = 1.0980 0 = 599.15 P = 710.01 RNL = 3.1917

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3117 -.3586 -.3750 -.5428 -.6128 -.6235
 .757 -.3375 -.3744 -.4110 -.5394 -.0000 -.6231
 .805 -.3473 -.4010 -.4498 -.5490 -.6130 -.6267
 .887 -.4031 -.4540 -.5001 -.5799 -.6199 -.6353
 .908 -.5241 -.5532 -.5713 -.6099 -.6394 -.6351
 ALPHA (5) = 11.958 BETA (3) = 4.256 MACH = 1.0980 0 = 599.15 P = 710.01 RNL = 3.1917

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.3439 -.3804 -.3957 -.5223 -.5712 -.5719
 .757 -.3931 -.3981 -.4220 -.5206 -.0000 -.5727
 .805 -.4008 -.4229 -.4535 -.5283 -.5760 -.5762
 .867 -.4569 -.4764 -.5062 -.5347 -.5846 -.5842
 .908 -.5553 -.56213 -.5873 -.5996 -.6187 -.6113

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) - 140A/B/C ORB SPEED BRAKE

REFERENCE DATA

PARAMETRIC DATA						
RUDDER =	-10.000	SPDBRK =	.000			
BDFLAP =	-11.700	L-ELVN =	10.000			
R-ELVN =	-10.000	MACH =	.500			
ALPHA (1) =	-4.051	BETA (1) =	-3.840	MACH =	.89997	P = 1058.8
SECTION (1) RIGHT HAND INSIDE				DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.708	-.2008	-.2151	-.2248	-.2912	-.2900	-.2822
.757	-.2098	-.2293	-.2419	-.3103	.0000	-.2893
.805	-.2103	-.2318	-.2710	-.3208	-.3250	-.2800
.897	-.2384	-.2993	-.3191	-.3474	-.3191	-.3210
.969	-.2910	-.2555	-.4341	-.3898	-.3027	-.2603
ALPHA (1) =	-4.055	BETA (2) =	.202	MACH = .89997	0	600.24 P = 1058.8
SECTION (1) RIGHT HAND INSIDE				DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.708	-.2008	-.2151	-.2248	-.2912	-.2900	-.2822
.757	-.2098	-.2293	-.2419	-.3103	.0000	-.2893
.805	-.2103	-.2318	-.2710	-.3208	-.3250	-.2800
.897	-.2384	-.2993	-.3191	-.3474	-.3191	-.3210
.969	-.2910	-.2555	-.4341	-.3898	-.3027	-.2603
ALPHA (1) =	-4.070	BETA (3) = 4.283	MACH = .89997	0	600.24 P = 1058.8	RNL = 3.6827
SECTION (1) RIGHT HAND INSIDE				DEPENDENT VARIABLE CP		
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CY						
.708	-.2124	-.2114	-.2181	-.2644	-.2708	-.2623
.757	-.2169	-.2176	-.2209	-.2647	-.0000	-.2628
.805	-.2183	-.2212	-.2257	-.2768	.2801	-.2673
.897	-.2297	-.2371	-.2433	-.3079	-.2894	-.2597
.969	-.3108	-.2204	-.2735	-.3821	-.3053	-.2616

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140AV/B/C ORB SPEED BRAKE (XEE879)									
ALPHA (2) = .045	BETA (1) = -3.859	MACH = .89957	O = 599.75	P = 1058.8	RNL = 3.5771	X/CP	Z/BV	.3170	.4120
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
.708	-.1648	-.1815	-.1849	-.2553	-.2645	-.2576			
.757	-.1746	-.1917	-.2015	-.2527	.0000	-.2821			
.805	-.1788	-.1967	-.2168	-.2698	-.2741	-.2527			
.857	-.2019	-.2041	-.2353	-.3195	-.2790	-.2529			
.969	-.2511	-.2156	-.2848	-.3722	-.2579	-.2369			
ALPHA (2) = .042	BETA (1) =	.192	MACH = .89957	O = 599.75	P = 1058.8	RNL = 3.5771	X/CP	Z/BV	.3170
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
.708	-.1745	-.1976	-.1994	-.2534	-.2603	-.2758			
.757	-.1778	-.2023	-.2105	-.2691	.0000	-.2660			
.805	-.1866	-.2100	-.2210	-.2751	-.2771	-.2601			
.857	-.2052	-.2157	-.2417	-.3167	-.2774	-.2612			
.959	-.2764	-.2202	-.2970	-.3900	-.2996	-.2400			
ALPHA (2) = .032	BETA (3) = .032	.260	MACH = .89957	O = 599.75	P = 1058.8	RNL = 3.5771	X/CP	Z/BV	.3170
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
.708	-.2002	-.1988	-.1914	-.2305	-.2440	-.2349			
.757	-.2073	-.2011	-.1923	-.2287	.0000	-.2371			
.805	-.2014	-.2061	-.1914	-.2202	-.2561	-.2405			
.857	-.216	-.2039	-.1828	-.2513	-.2711	-.2449			
.959	-.2349	-.2039	-.1533	-.3427	-.3172	-.2377			
ALPHA (3) = .023	BETA (1) =	-3.861	MACH = .90070	O = 600.14	P = 1057.3	RNL = 3.5793	X/CP	Z/BV	.3170
SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP									
.708	-.1473	-.1615	-.1724	-.2408	-.2359	-.2332			
.757	-.1572	-.1679	-.1829	-.2406	.0000	-.2366			
.805	-.1551	-.1796	-.1976	-.2496	-.2569	-.2364			
.857	-.1822	-.1862	-.2156	-.2921	-.2660	-.2339			
.959	-.2494	-.1921	-.2463	-.3794	-.2871	-.2270			

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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		AMES 11-073(0A14B) -140A/B/C		ORB SPEED BRAKE			
ALPHA (3) =	4.017	BETA (2) =	.197	MACH = .90070	0 = 600.44	P = 1057.3	RNL = 3.5793
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CV
ALPHA (3) =	4.017	BETA (3) =	4.251	MACH = .90070	0 = 600.44	P = 1057.3	RNL = 3.5793
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CV
ALPHA (4) =	7.937	BETA (1) =	-3.857	MACH = .90017	0 = 600.17	P = 1058.1	RNL = 3.5825
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920	X/CV
ALPHA (4) =	7.934	BETA (2) =	.192	MACH = .90017	0 = 600.17	P = 1058.1	RNL = 3.5825
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP							
Z/BV	.3170	.4120	.5070	.6020	.69.0	.7920	X/CV

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C ORB SPEED BRAKE
 $\alpha_{L,0} = 7.936$ $\beta_{T,A} = 3 = 4.250$ MACH = .90017 0 = 600.17 P = 1058.1 RNL = 3.5825

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BW .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .708 -.1864 -.2054 -.1912 -.2105 -.2124 -.2214
 .757 -.2014 -.2144 -.2043 -.1955 -.0000 -.2262
 .805 -.2040 -.2195 -.2110 -.1988 -.2274 -.2229
 .857 -.2335 -.2251 -.2131 -.2203 -.2269 -.2236
 .909 -.2897 -.2377 -.2174 -.2593 -.2738 -.2265

$\alpha_{L,0} = 11.969$ $\beta_{T,A} = 1 = -3.847$ MACH = .89890 0 = 599.14 P = 1059.2 RNL = 3.5769

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BW .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .1744 -.1791 -.1864 -.1909 -.2376 -.2625 -.2423
 .1757 -.1791 -.1915 -.1909 -.2368 -.0000 -.2483
 .1855 -.1917 -.1970 -.2047 -.2515 -.2666 -.2418
 .2047 -.2134 -.2098 -.2195 -.2878 -.2797 -.2445
 .2539 -.2129 -.2342 -.3794 -.2856 -.2856 -.2257

$\alpha_{L,0} = 11.376$ $\beta_{T,A} = 2 = .195$ MACH = .89890 0 = 599.14 P = 1059.2 RNL = 3.5769

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BW .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .1826 -.1576 -.1622 -.2332 -.2370 -.2399
 .1855 -.2053 -.2020 -.2292 -.0000 -.2408
 .1865 -.2053 -.2034 -.2389 -.2618 -.2396
 .1875 -.2135 -.2155 -.1903 -.2673 -.2737 -.2402
 .1885 -.2227 -.2359 -.1858 -.3311 -.2987 -.2371

$\alpha_{L,0} = 11.956$ $\beta_{T,A} = 3 = 4.265$ MACH = .89890 0 = 599.14 P = 1059.2 RNL = 3.5769

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BW .3170 .4120 .5070 .6020 .6970 .7920

X/CPV .2397 -.2253 -.2204 -.2233 -.2333 -.2164
 .256 -.2222 -.2211 -.2211 -.0000 -.2176
 .265 -.2456 -.2331 -.2257 -.2331 -.2159
 .287 -.2732 -.2778 -.2292 -.2397 -.2177
 .358 -.3269 -.2128 -.2371 -.2652 -.2205

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(XEBK79)

AMES 11-073(OA14B) -140A/B/C ORB SPEED BRAKE

DEPENDENT VARIABLE CP

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C ORB SPEED BRAKE

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(XE8K8D) (13 AUG 75)

REFERENCE DATA

SREF	=	2680.0003	50. FT.	XMP	=	1076.6800	IN. X0
LREF	=	47.8000	IN.	YMP	=	.0000	IN. Y0
BREF	=	936.0680	IN.	ZMP	=	375.0000	IN. Z0
SCALE	=	.0320					

ALPHA (1) = -4.078 BETA (1) = -7.858 MACH = .59728

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-1605	-1619	-1555	-1602	-1844	-1972
.757	-1617	-1610	-1519	.0000	-1976	
.805	-1629	-1555	-1424	-1401	-1713	-1960
.887	-1569	-1466	-1270	-1192	-1588	-1860
.958	-1747	-1362	-0946	-0794	-1232	-1255

ALPHA (1) = -4.052 BETA (2) = -3.836 MACH = .59728

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-1657	-1600	-1553	-1553	-1796	-1897
.757	-1591	-1619	-1487	-1463	.0000	-1939
.805	-1622	-1551	-1378	-1373	-1656	-1906
.887	-1589	-1465	-1225	-1128	-1564	-1867
.958	-1713	-1302	-0795	-0614	-1199	-1332

ALPHA (1) = -4.061 BETA (3) = .183 MACH = .59728

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV

.708	-1733	-1679	-1613	-1721	-2063	-2179
.757	-1735	-1639	-1589	-1536	.0000	-2158
.805	-1707	-1660	-1452	-1575	-1948	-2193
.887	-1705	-1517	-1245	-1408	-1679	-2101
.958	-1646	-1225	-0818	-0912	-1726	-1875

PARAMETRIC DATA

RUDDER = -10.000 SPDBRK = .000

BDFLAP = -11.700 L-ELVN = 10.000

R-ELVN = -10.000 MACH = .600

RN/L = 4.8298

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) -140A/B/C ORB SPEED BRAKE (XEBKB0)												
ALPHA (1) = -3.963	BETA (4) = 4.258	MACH = .59728	0 = 595.86	P = 2386.0	RNL = 4.8298	Z/BY	.3170	.4120	.5070	.6020	.6970	.7920
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP												
X/CN	.709	-1.697	-1.690	-1.636	-1.757	-1.938	-2.068					
	.557	-1.746	-1.650	-1.561	-1.679	.0000	-2.051					
	.805	-1.780	-1.641	-1.514	-1.584	-1.939	-2.011					
	.537	-1.774	-1.634	-1.525	-1.507	-1.839	-1.971					
	.358	-2.012	-1.864	-1.695	-1.304	-1.627	-1.862					
	ALPHA (1) = -3.965	BETA (5) = 8.327	MACH = .59728	0 = 595.86	P = 2386.0	RNL = 4.8298						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP												
X/CV	.4170	.4120	.5070	.6020	.6970	.7920						
	.559	-1.831	-1.812	-1.804	-1.2296	-2.780	-2.877					
	.557	-1.829	-1.821	-1.776	-2.180	.0000	-2.787					
	.555	-1.829	-1.825	-1.757	-2.135	-2.673	-2.872					
	.557	-2.015	-1.893	-1.694	-1.2079	-2.770	-3.016					
	.358	-2.024	-1.791	-1.2649	-1.1859	-2.874						
	ALPHA (1) = -3.963	BETA (1) = -7.896	MACH = .59846	0 = 594.33	P = 2386.5	RNL = 4.8222						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP												
Z/BY	.3170	.4120	.5070	.6020	.6970	.7920						
	.559	-1.831	-1.812	-1.804	-1.2296	-2.780	-2.877					
	.557	-1.829	-1.821	-1.776	-2.180	.0000	-2.787					
	.555	-1.829	-1.825	-1.757	-2.135	-2.673	-2.872					
	.557	-2.015	-1.893	-1.694	-1.2079	-2.770						
	.358	-2.024	-1.791	-1.2649	-1.1859	-2.874						
	ALPHA (1) = -3.963	BETA (2) = -5.054	MACH = .59846	0 = 594.33	P = 2386.5	RNL = 4.8222						
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP												
Z/B	.5170	.5120	.5070	.5020	.5970	.6970	.7920					
	.559	-1.831	-1.812	-1.804	-1.2296	-2.780	-2.877					
	.557	-1.829	-1.821	-1.776	-2.180	.0000	-2.787					
	.555	-1.829	-1.825	-1.757	-2.135	-2.673	-2.872					
	.557	-2.015	-1.893	-1.694	-1.2079	-2.770						
	.358	-2.024	-1.791	-1.2649	-1.1859	-2.874						
	ALPHA (1) = -3.963	BETA (3) = -1.661	MACH = .59846	0 = 594.33	P = 2386.5	RNL = 4.8222						

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C ORB SPEED BRAKE
ALPHA (2) = .029 BETA (3) = .176 MACH = .59646 Q = 594.33 P = 2386.5 RNL = 4.8222

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.1689 -.1576 -.1578 -.1620 -.1941 -.2005

.757 -.1717 -.1611 -.1485 -.1523 .0000 -.2041

.805 -.1626 -.1590 -.1403 -.1464 -.1800 -.2024

.897 -.1651 -.1442 -.1207 -.1287 -.1684 -.1998

.968 -.1832 -.1233 -.0838 -.0796 -.1341 -.1724

ALPHA (2) = .052 BETA (4) = .4.239 MACH = .59646 Q = 594.33 P = 2386.5 RNL = 4.8222

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.1619 -.1635 -.1545 -.1678 -.1855 -.1929

.757 -.1675 -.1633 -.1460 -.1569 .0000 -.1936

.805 -.1650 -.1538 -.1353 -.1521 -.1782 -.1891

.827 -.1526 -.1472 -.1287 -.1417 -.1708 -.1845

.968 -.1990 -.1255 -.0842 -.1150 -.1467 -.1693

ALPHA (2) = .005 BETA (5) = .8.284 MACH = .59646 Q = 594.33 P = 2386.5 RNL = 4.8222

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.1769 -.1787 -.1740 -.2126 -.2526 -.2680

.757 -.1865 -.1759 -.1752 -.2036 .0000 -.2611

.805 -.1895 -.1836 -.1709 -.2003 -.2529 -.2633

.897 -.2050 -.1842 -.1614 -.1903 -.2526 -.2687

.968 -.2634 -.1776 -.1231 -.1567 -.2495 -.2758

ALPHA (3) = 3.933 BETA (1) = -7.902 MACH = .59628 Q = 593.97 P = 2386.5 RNL = 4.8207

SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.1515 -.1506 -.1501 -.1581 -.1849 -.1903

.757 -.1518 -.1501 -.1451 -.1499 .0000 -.1927

.805 -.1552 -.1464 -.1395 -.1359 -.1756 -.1901

.827 -.1485 -.1484 -.1226 -.1189 -.1567 -.1908

.968 -.1622 -.1265 -.0917 -.0678 -.1139 -.1481

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C ORB SPEED BRAKE
 ALPHA (4) = 8.043 BETA (5) = 8.283 MACH = .59626 0 = 533.85 P = 2386.1 RNL = 4.8197

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.1641 -.1823 -.1824 -.1964 -.2067 -.2056
 .757 -.1893 -.1820 -.1810 -.1942 -.0000 -.1990
 .865 -.1958 -.1940 -.1864 -.1839 -.1985 -.2037
 .897 -.2024 -.2033 -.1822 -.1713 -.1980 -.2035
 .958 -.2620 -.2168 -.1572 -.1557 -.1933 -.2255

ALPHA (5) = 11.97* BETA (1) = -7.850 MACH = .59650 0 = 534.19 P = 2385.7 RNL = 4.8199

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.1411 -.1404 -.1414 -.1606 -.1958 -.2074
 .757 -.1351 -.1333 -.1409 -.1556 -.0000 -.2048
 .935 -.1291 -.1392 -.1362 -.1478 -.1840 -.2091
 .881 -.128* -.1285 -.1288 -.1241 -.1696 -.2084
 .959 -.1321 -.1474 -.1359 -.1151 -.1657

ALPHA (5) = 11.393 BETA (2) = -3.842 MACH = .59650 0 = 534.19 P = 2385.7 RNL = 4.8199

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.1545 -.1481 -.1502 -.1435 -.1561 -.1725
 .757 -.1556 -.1481 -.1436 -.1423 -.0000 -.1727
 .805 -.1501 -.1491 -.1336 -.1340 -.1498 -.1727
 .881 -.1423 -.1427 -.1161 -.1056 -.1397 -.1606
 .958 -.1721 -.1715 -.1639 -.1624 -.0975 -.1259

ALPHA (5) = 12.125 BETA (3) = -.179 MACH = .59650 0 = 534.19 P = 2385.7 RNL = 4.8199

SECTION : RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.1560 -.1503 -.1484 -.1457 -.1614 -.1666
 .757 -.1529 -.1456 -.1406 -.1370 /.0000 -.1635
 .835 -.1556 -.1471 -.1382 -.1275 -.1502 -.1666
 .987 -.1482 -.1382 -.1116 -.1159 -.1478 -.1648
 .958 -.1751 -.1751 -.0681 -.0626 -.0831 -.1327

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(XECB00)

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TABULATED PRESSURE DATA - DATA 1 AMES 11-073-1

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AMES 11-073(0A148) -140A/B/C CFD SPEED BRAKE
ALPHA (5) = 12.027 BETA (4) = 4.242 MACH = .59650 0 = 594.19 P = 2385.7 RNL = 4.8159
SECTION: (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY .7708 -.1673 -.1654 -.1630 -.1703 -.1682 -.1647
.757 -.1802 -.1748 -.1665 -.1611 .0000 -.1684
.925 -.1832 -.1585 -.1654 -.1561 -.1680 -.1542
.887 -.2019 -.1931 -.1528 -.1476 -.1573 -.1643
.953 -.2691 -.1902 -.1325 -.1306 -.1334 -.1403

ALPHA (5) = 12.051 BETA (5) = 8.297 MACH = .59650 0 = 594.19 P = 2385.7 RNL = 4.8169

SECTION: (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BY .3170 .4120 .5070 .6020 .6970 .7920

X/CY .7708 -.1754 -.1922 -.1938 -.2076 -.2097 -.2192
.757 -.1917 -.1932 -.1869 -.2031 .0C10 -.2240
.825 -.1926 -.2344 -.1850 -.1952 -.2102 -.2235
.887 -.2224 -.2337 -.1836 -.1898 -.2178 -.2215
.953 -.2356 -.2187 -.1793 -.1739 -.2159 -.2618

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C ORB SPEED BRAKE

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
 UREF = 474.8000 IN. YMRP = .0000 IN. YO
 EREF = 936.0560 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0300

ALPHA (1) = -3.955 BETA (1) = .178 MACH = 1.3929
 SECTION : 1) RIGHT HAND 'NSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CY

.708 -.2324 -.2442 -.2479 -.2979 -.2053 -.3037
 .757 -.2613 -.2525 -.2676 -.2676 -.3041 -.3000
 .805 -.3035 -.2808 -.2892 -.2892 -.3159 -.3056
 .887 -.3639 -.3275 -.3253 -.3253 -.3457 -.3284
 .953 -.4265 -.4111 -.4111 -.4191 -.4193 -.3878 -.3574

ALPHA (2) = .028 BETA (1) = .177 MACH = 1.3894
 SECTION : 1) RIGHT HAN NSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CY

.708 -.2448 -.2581 -.2606 -.3242 -.3358 -.3355
 .757 -.2935 -.2747 -.2816 -.2816 -.3290 -.0000 -.3370
 .805 -.3157 -.2947 -.3054 -.3054 -.3408 -.3459 -.3399
 .887 -.3725 -.3378 -.3421 -.3421 -.3700 -.3587 -.3431
 .958 -.4271 -.4213 -.4394 -.4394 -.4420 -.4148 -.3899

ALPHA (3) = 3.945 BETA (1) = -3.872 MACH = 1.3917
 SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/CY

.708 -.2558 -.2677 -.2713 -.3465 -.3665 -.3658

.757 -.3307 -.2826 -.2913 -.3494 .0000 -.3682

.805 -.3204 -.2997 -.3120 -.3588 -.3730 -.3708

.887 -.3742 -.3422 -.3470 -.3850 -.3846 -.3748

.958 -.4460 -.4143 -.4357 -.4479 -.4308 -.4071

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(XEB081) (13 AUG 75)

PARAMETRIC DATA

RUDDER = 10.000 SPOILER = 10.000
 BOFLAP = -11.700 L-ELVN = -10.000
 R-ELVN = 10.000 MACH = 1.400

P = 441.59 RNL = 2.9281

P = 443.71 RNL = 2.9315

P = 442.30 RNL = 2.9226

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(06148) -140A/B/C ORB SPEED BRAKE
ALPHA (3) = 3.983 BETA (2) = .185 MACH = 1.3917 Q = 599.67 P = 442.30 RNL = 2.9226

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2561 -.2711 -.2734 -.3455 -.3612 -.3619

.757 -.3049 -.2863 -.2944 -.3487 .0000 -.3634

.805 -.3249 -.3059 -.3173 -.3600 -.3696 -.3667

.887 -.3770 -.3482 -.3561 -.3887 -.3822 -.3691

.968 -.4456 -.4270 -.4526 -.4589 -.4345 -.4126

ALPHA (3) = 3.932 BETA (3) = 4.246 MACH = 1.3917 Q = 599.67 P = 442.30 RNL = 2.9226

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2476 -.2620 -.2710 -.3459 -.3614 -.3607

.757 -.2813 -.2775 -.2900 -.3503 .0000 -.3633

.805 -.2970 -.2970 -.3168 -.3614 -.3715 -.3674

.887 -.3390 -.3460 -.3568 -.3925 -.3845 -.3735

.968 -.4197 -.4408 -.4600 -.4658 -.4395 -.4208

ALPHA (4) = 7.903 BETA (1) = .179 MACH = 1.3906 Q = 599.65 P = 443.00 RNL = 2.9169

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .707 -.2607 -.2730 -.2770 -.3659 -.3881 -.3881

.757 -.3013 -.2882 -.2982 -.3659 .0000 -.3910

.805 -.3184 -.3063 -.3219 -.3760 -.3953 -.3948

.897 -.3614 -.3464 -.3605 -.4057 -.4074 -.4001

.968 -.4307 -.4221 -.4525 -.4723 -.4554 -.4417

ALPHA : 5) = 11.906 BETA (1) = -3.868 MACH = 1.3903 Q = 599.44 P = 443.00 RNL = 2.9079

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/DV .3170 .4120 .5070 .6020 .6970 .7920

X/CV .708 -.2721 -.2866 -.2917 -.3835 -.4127 -.4144

.757 -.3263 -.3043 -.3225 -.3852 .0000 -.4173

.805 -.3523 -.3263 -.3352 -.3934 -.4185 -.4219

.987 -.4144 -.3700 -.3779 -.4193 -.4280 -.4268

.968 -.4859 -.4454 -.4553 -.4775 -.4700 -.4550

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TABULATED PRESSURE DATA - 0A14B (AMES 11-07310A14B1 - 140A/B/C ORB SPEED BRAKE

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		AMES 11-07310A14B1 - 140A/B/C		ORB SPEED BRAKE		(XEBK81)		
ALPHA : 51 = 11.888		BETA (2) =	.169	MACH = 1.3903	0	= 599.44	P = 443.00	RNL = 2.9079
SECTION : 1)RIGHT HAND INSIDE		DEPENDENT VARIABLE CP						
Z/BV	X/CV							
.3170	.4120	.5070	.6020	.6970	.7920			
	X/CV							
.708	-.2630	-.2763	-.2837	-.3809	-.4080	-.4085		
.757	-.3005	-.2913	-.3062	-.3814	-.4000	-.4119		
.805	-.3145	-.3075	-.3280	-.3896	-.4148	-.4160		
.857	-.3525	-.3487	-.3662	-.4189	-.4259	-.4250		
.958	-.4301	-.4267	-.4576	-.4830	-.4718	-.4638		
	ALPHA : 51 = 11.887	BETA (3) =	4.249	MACH = 1.3903	0	= 599.44	P = 443.00	RNL = 2.9079
	SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV	X/CV							
.3170	.4120	.5070	.6020	.6970	.7920			
	X/CV							
.708	-.2614	-.2788	-.2836	-.3808	-.4075	-.4077		
.757	-.2820	-.2914	-.3085	-.3830	-.4000	-.4113		
.805	-.2890	-.3079	-.3351	-.3944	-.4153	-.4155		
.857	-.3189	-.3546	-.3779	-.4261	-.4280	-.4244		
.958	-.4149	-.4537	-.4861	-.4963	-.4776	-.4692		
	ALPHA : 51 = 15.870	BETA (1) =	.160	MACH = 1.3887	0	= 599.91	P = 444.41	RNL = 2.9056
	SECTION : 1)RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV	X/CV							
.3170	.4120	.5070	.6020	.6970	.7920			
	X/CV							
.708	-.2720	-.2858	-.2965	-.3956	-.4246	-.4250		
.757	-.3133	-.3024	-.3166	-.3958	-.4000	-.4294		
.805	-.3309	-.3205	-.3422	-.4069	-.4330	-.4335		
.857	-.3739	-.3555	-.3844	-.4357	-.4434	-.4436		
.958	-.4556	-.4518	-.4806	-.5007	-.4886	-.4851		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C

ORB SPEED BRAKE

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
 LREF = 474.8100 IN. YMRP = .0000 IN. YO
 EREF = 936.0580 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0300

ALPHA (1) = -.4.001 BETA (1) = .172 MACH = 1.2466 Q = 600.03 P = 551.59 RN/L = 3.0277

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.2559 -.2747 -.2832 -.3866 -.4159 -.4154
 .757 -.3076 -.2928 -.3083 -.3895 .0000 -.4171
 .805 -.3243 -.3163 -.3373 -.4026 -.4244 -.4215
 .887 -.3862 -.3662 -.3813 -.4389 -.4408 -.4252
 .958 -.4710 -.4569 -.4863 -.5191 -.5017 -.4765

ALPHA (2) = .004 BETA (1) = .171 MACH = 1.2457 Q = 599.67 P = 552.28 RN/L = 3.0295

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.2614 -.2806 -.2873 -.4079 -.4435 -.4440
 .757 -.3079 -.2987 -.3141 -.4072 .0000 -.4471
 .805 -.3261 -.3190 -.3448 -.4205 -.4529 -.4505
 .887 -.3774 -.3708 -.3896 -.4553 -.4677 -.4572
 .968 -.4577 -.4594 -.4853 -.5337 -.5267 -.5078

ALPHA (3) = 3.910 BETA (1) = -3.880 MACH = 1.2454 Q = 599.62 P = 552.51 RN/L = 3.0275

SECTION (1) RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .708 -.2741 -.2901 -.3005 -.4221 -.4644 -.4651
 .757 -.3140 -.3077 -.3258 -.4204 .0000 -.4695
 .805 -.3278 -.3295 -.3537 -.4284 -.4690 -.4728
 .887 -.3836 -.3855 -.3989 -.4574 -.4791 -.4791
 .968 -.4936 -.4789 -.4915 -.5115 -.5161 -.5089

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(XEBK82) (13 AUG 75)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C ORB SPEED BRAKE
 SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920
 X/ACV
 .708 -.2747 -.2921 -.3022 -.4257 -.4680 -.4702
 .757 -.3132 -.3069 -.3267 -.4242 -.0000 -.4733
 .805 -.3200 -.3282 -.3560 -.4378 -.4755 -.4775
 .887 -.3595 -.3793 -.3993 -.4700 -.4900 -.4859
 .968 -.4559 -.4712 -.4893 -.5409 -.5460 -.5344

ALPHA (3) = 3.915 BETA (2) = .192 MACH = 1.2454 0 = 599.82 P = 552.51 RNL = 3.0275

SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/ACV
 .708 -.2611 -.2855 -.2944 -.4289 -.4724 -.4741
 .757 -.2955 -.3017 -.3217 -.4296 -.0000 -.4777
 .805 -.2974 -.3228 -.3568 -.4432 -.4821 -.4826
 .887 -.3429 -.3707 -.4059 -.4828 -.4983 -.4988
 .968 -.4454 -.4651 -.5186 -.5709 -.5580 -.5454

ALPHA (4) = 7.875 BETA (1) = .170 MACH = 1.2457 0 = 599.87 P = 552.29 RNL = 3.0295

SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/ACV
 .709 -.2586 -.2852 -.3000 -.4339 -.4870 -.4909
 .757 -.2955 -.3005 -.3254 -.4322 -.0000 -.4957
 .805 -.3024 -.3191 -.3541 -.4409 -.4943 -.5008
 .887 -.3297 -.3726 -.3998 -.4708 -.5054 -.5074
 .968 -.4254 -.4580 -.4829 -.5262 -.5503 -.5507

ALPHA (5) = 11.933 BETA (1) = -3.862 MACH = 1.2456 0 = 600.06 P = 552.51 RNL = 3.0278

SECTION 1: RIGHT HAND INSIDE
 DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/ACV
 .709 -.3116 -.3276 -.3360 -.4632 -.5099 -.5133
 .757 -.3553 -.4162 -.3607 -.4594 -.0000 -.5172
 .805 -.3915 -.4693 -.3897 -.4671 -.5133 -.5220
 .887 -.4352 -.4213 -.4335 -.4925 -.5208 -.5273
 .968 -.5233 -.5114 -.5143 -.5346 -.5455 -.5421

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C ORB SPEED BRAKE (XEBK82)						
ALPHA (5) = 11.948	BETA (2) = .178	MACH = 1.2456	O = 600.06	P = 552.51	RNL = 3.0278	
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	.708	-.2796	-.2972	-.3093	-.4497	-.5058
	.757	-.3025	-.3108	-.3354	-.4461	-.5150
	.805	-.3108	-.3311	-.3669	-.4555	-.5208
	.887	-.3395	-.3802	-.4107	-.4845	-.5283
	.958	-.4459	-.4802	-.4971	-.5356	-.5691
ALPHA (5) = 11.569	BETA (3) = .1.251	MACH = 1.2456	O = 600.06	P = 552.51	RNL = 3.0278	
SECTION 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BV	.3170	.4120	.5070	.6020	.6970	.7920
X/CV	.708	-.2763	-.2986	-.3121	-.4600	-.5158
	.757	-.2981	-.3134	-.3402	-.4573	-.5228
	.805	-.3047	-.3337	-.3742	-.4709	-.5250
	.887	-.3531	-.3833	-.4239	-.5020	-.5390
	.958	-.4600	-.4742	-.5228	-.5868	-.5953

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148; -14DA/B/C ORB SPEED BRAKE

REFERENCE DATA

SETF = 2590.0000 SQ.FT. XMRP = 1076.6800 IN. XD
 LREF = 474.6000 IN. YMRP = .0000 IN. YO
 EREF = 936.0580 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0300

ALPHA (1) = -3.943 BETA (1) = .171 MACH = 1.0992 Q = - 599.30 P = 708.59 RN/L = 3.1942

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.2823 -.3072 -.3205 -.4785 -.5397 -.5433

.757 -.3227 -.3271 -.3505 -.4754 -.0000 -.5470

.825 -.3362 -.3517 -.3846 -.4870 -.5443 -.5508

.887 -.4014 -.4070 -.4374 -.5218 -.5567 -.5544

.958 -.5103 -.5142 -.5334 -.5842 -.5932 -.6013

ALPHA (2) = .065 BETA (1) = .171 MACH = 1.0980 Q = - 599.15 P = 710.01 RN/L = 3.1985

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.2563 -.2255 -.2983 -.4730 -.5442 -.5512

.757 -.2852 -.3042 -.3307 -.4674 -.0000 -.5561

.825 -.2957 -.3271 -.3698 -.4778 -.5483 -.5592

.897 -.3532 -.3535 -.4223 -.5133 -.5573 -.5702

.958 -.4809 -.5029 -.5205 -.5737 -.5838 -.5913

ALPHA (3) = 3.859 BETA (1) = -3.876 MACH = 1.0981 Q = - 598.75 P = 709.30 RN/L = 3.1983

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/EV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.2625 -.3050 -.3199 -.4946 -.5653 -.5693

.757 -.2224 -.3265 -.3555 -.4932 .0000 -.5745

.825 -.2297 -.3495 -.3908 -.5017 -.5655 -.5767

.887 -.3934 -.4154 -.4424 -.5319 -.575 .5839

.958 -.5250 -.5200 -.5515 -.5876 -.5968 -.5931

(XEB03) (13 AUG 75)

PARAMETRIC DATA

RUDDER = 10.000 SPDBRK = .006
 BUFLAP = -11.700 L-ELVN = -0.000
 R-ELVN = 10.000 MACH = 1.100

PARAMETRIC DATA

(XEB03) (13 AUG 75)

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TABLED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C ORB SPEED BRAKE (XEBKB3)						
ALPHA (3) = 3.908	BETA (2) = .189	MACH = 1.0981	Q = 598.75	P = 709.30	RNL = 3.1983	
SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BY .3170 .4120 .5070 .6020 .6970 .7920	X/CY					
.708 -.26552 -.23029 -.3044 -.4869 -.5649 -.5726	.757 -.2866 -.3067 -.3362 -.4803 -.0000 -.5775	.805 -.2946 -.3283 -.3706 -.4895 -.5673 -.5818	.837 -.3135 -.3789 -.4251 -.5249 -.5750 -.5821	.958 -.4749 -.4800 -.5234 -.5811 -.5942 -.6022		
ALPHA (3) = 3.913	BETA (3) = 4.243	MACH = 1.0981	Q = 598.75	P = 709.30	RNL = 3.1983	
SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BY .3170 .4120 .5070 .6020 .6970 .7920	X/CY					
.708 -.2598 -.2946 -.3079 -.5018 -.5915 -.6099	.757 -.2717 -.3087 -.3388 -.4877 -.0000 -.6148	.805 -.2750 -.3266 -.3747 -.4979 -.5019 -.6170	.837 -.3355 -.3770 -.4241 -.5237 -.5002 -.6252	.958 -.4539 -.4634 -.5033 -.5514 -.6294 -.6647		
ALPHA (4) = 8.023	BETA (1) = .173	MACH = 1.0972	Q = 598.87	P = 710.71	RNL = 3.1996	
SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BY .3170 .4120 .5070 .6020 .6970 .7920	X/CY					
.708 -.2699 -.2392 -.3131 -.4959 -.5803 -.5883	.757 -.2953 -.3150 -.3451 -.4896 -.0000 -.5943	.805 -.3031 -.3373 -.3775 -.5005 -.5817 -.5977	.837 -.3611 -.3971 -.4317 -.5347 -.5863 -.5984	.958 -.4881 -.4712 -.5272 -.5849 -.6038 -.6066		
ALPHA (5) = 11.586	BETA (1) = -3.856	MACH = 1.0968	Q = 598.64	P = 710.95	RNL = 3.1978	
SECTION : 1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP						
Z/BY .3170 .4120 .5070 .6020 .6970 .7920	A-CY					
.708 -.2922 -.3208 -.3301 -.4930 -.5575 -.5639	.757 -.3155 -.3349 -.3597 -.4836 -.0000 -.5670	.805 -.3279 -.3524 -.3934 -.4966 -.5624 -.5704	.837 -.3761 -.4137 -.4559 -.5333 -.5716 -.5786	.958 -.4543 -.4746 -.5735 -.5855 -.6061 -.5956		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C ORB SPEED BRAKE
ALPHA (5) = 11.954 BETA (2) = .179 MACH = 1.0968 Q = 598.64 P = 710.95 RN/L = 3.1978

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.7298 -.2927 -.3205 -.3298 -.4993 -.5665 -.5740
.757 -.3162 -.3359 -.3599 -.4923 .0000 -.5801
.625 -.3274 -.3563 -.3936 -.5020 -.5706 -.5859
.687 -.3595 -.4348 -.4464 -.5340 -.5789 -.5855
.958 -.5062 -.4853 -.5388 -.5835 -.5873 -.5843

ALPHA (5) = 11.953 BETA (3) = 4.251 MACH = 1.0968 Q = 598.64 P = 710.95 RN/L = 3.1978

SECTION (1) RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY -.2707 -.3030 -.3175 -.5001 -.5978 -.6194
.757 -.6621 -.3168 -.3502 -.4689 .0000 -.6274
.325 -.2921 -.3565 -.3842 -.4860 -.5949 -.6325
.887 -.3223 -.3501 -.4273 -.5151 -.5927 -.6335
.958 -.4523 -.4535 -.4998 -.5163 -.5731 -.6243

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TABULATED PRESSURE DATA - OA14B 1 AMES 11-073-1

AMES 11-073(OA14B) - 140A/B/C ORB SPEED BRAKE

REFERENCE DATA

X-CF = 2530.000 SQ.FT. X-MP = 1076.6800 IN. X0
 Y-CF = .47416.000 IN. Y-MP = .0000 IN. Y0
 Z-CF = .935.0000 IN. Z-MP = .375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -3.955 BETA (1) = .165 MACH = .89930 Q = 599.63 P = 1059.2 RN/L = 3.5885

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .317C .4120 .5070 .6020 .6970 .7920

X/CY	.739	-.2392	-.2393	-.2362	-.2961	-.2145	-.3120
	.557	-.2342	-.2416	-.2417	-.2951	-.0000	-.3147
	.886	-.2245	-.2359	-.2441	-.3137	-.3128	-.3157
	.887	-.2255	-.2268	-.2672	-.3407	-.3219	-.3093
	.983	-.2631	-.1900	-.3060	-.4094	-.3161	-.2814

ALPHA (2) = .057 BETA (1) = .165 MACH = .89770 Q = 598.28 P = 1060.7 RN/L = 3.5863

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .317C .4120 .5070 .6020 .6970 .7920

X/CY	.739	-.2202	-.2221	-.2135	-.2646	-.2873	-.2848
	.757	-.2158	-.2257	-.2152	-.2539	-.0000	-.2945
	.855	-.2054	-.2239	-.2172	-.2745	-.2928	-.2935
	.897	-.2033	-.1956	-.2181	-.3036	-.2954	-.2759
	.985	-.2639	-.1707	-.2044	-.4075	-.3060	-.2552

ALPHA (3) = 3.889 BETA (1) = -3.885 MACH = .89803 Q = 598.38 P = 1060.0 RN/L = 3.5814

SECTION 1: RIGHT HAND INSIDE DEPENDENT VARIABLE CP

Z/B: .317C .4120 .5070 .6020 .6970 .7920

X/CY	.739	-.1876	-.1636	-.2010	-.2198	-.2248	-.2243
	.557	-.1907	-.1529	-.2018	-.2253	-.0000	-.2311
	.885	-.1862	-.1941	-.2038	-.2742	-.2359	-.2287
	.887	-.1857	-.2093	-.2099	-.2335	-.2415	-.2334
	.988	-.2518	-.2136	-.2073	-.2462	-.2613	-.2165

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (3) = 4.092 BETA (2) = .164 MACH = .89803 Q = 598.39 P = 1050.0 RFL = 3.5814

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.2102 -.2012 -.2043 -.2422 -.2655 -.2576
.757 -.2325 -.1984 -.2071 -.2405 -.0000 -.2571
.825 -.1937 -.1952 -.1999 -.2439 -.2691 -.2557
.897 -.1909 -.1916 -.1914 -.2624 -.2754 -.2550
.953 -.2446 -.1620 -.1502 -.3689 -.2896 -.2356

ALPHA (2) = 3.395 BETA (3) = 4.248 MACH = .89803 Q = 598.39 P = 1050.0 RFL = 3.5814

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .754 -.1978 -.2015 -.2075 -.2607 -.2851 -.2745
.755 -.2355 -.1975 -.2035 -.2424 -.0030 -.2824
.825 -.1932 -.1924 -.1949 -.2456 -.2875 -.2884
.895 -.1904 -.1914 -.1935 -.2711 -.2954 -.2719
.958 -.2355 -.1552 -.1495 -.3205 -.3128 -.2283

ALPHA (4) = 8.005 BETA (1) = .163 MACH = .89820 Q = 598.16 P = 1059.3 RFL = 3.5792

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .3170 .4120 .5070 .6020 .6970 .7920

X/CY .758 -.1980 -.2057 -.1936 -.2314 -.2483 -.2579
.757 -.2350 -.1987 -.1931 -.2251 -.0000 -.2495
.825 -.1939 -.1930 -.1933 -.2249 -.2699 -.2567
.895 -.1910 -.1913 -.1921 -.203 -.2909 -.2573
.958 -.2353 -.1932 -.1921 -.3027 -.3051 -.2402

ALPHA (5) = 1.515 BETA (4) = .155 MACH = .89570 Q = 597.36 P = 1061.4 RFL = 3.5769

SECTION 1: RIGHT HAND INSIDE

DEPENDENT VARIABLE CP

Z/BV .770 .4120 .5070 .6020 .6970 .7920

X/CY .757 -.2268 -.2210 -.2239 -.2448 -.2629 -.2595
.756 -.2261 -.2264 -.2185 -.2426 -.0000 -.2595
.825 -.2273 -.2277 -.2161 -.2409 -.2619 -.2658
.895 -.2265 -.2269 -.2155 -.2515 -.2783 -.2564
.958 -.2262 -.2262 -.2160 -.2960 -.2983 -.2321

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C ORB SPEED BRAKE

REFERENCE DATA

	SREF = 2533.000 SC.FT.	XMRP = 1076.6800 IN. XO	YMRP = .0000 IN. YO	ZMRP = 375.0000 IN. ZO	RUDDER = 0DFLAP = R-ELVN =	SPDRX = 10.000 L-ELVN = -10.000 MACH = .600	PAGE 6645 (13 AUG 75)
L-EF = 474.6000 IN.							
B2EF = 936.3580 IN.							
S-2LE = .0300							
ALPHA (1) = -3.933	BETA (1) = .164	MACH = .59620	O = 593.85	P = 2386.4	RVL = 4.8165		
SECTION 1: RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV .3170 .4120 .5070 .6020 .6970 .7920	X/CV						
.709 - .2269 -.2130 -.2023 -.2058 -.2385 -.2538	.757 -.2191 -.2028 -.1929 -.2018 -.0000 -.2531	.805 -.2126 -.1953 -.1825 -.1852 -.2296 -.2536	.887 -.1799 -.1826 -.1595 -.1655 -.2164 -.2503	.963 -.1958 -.1403 -.0903 -.1037 -.1640 -.2023			
ALPHA (2) = .072	BETA (1) = .163	MACH = .59620	O = 593.87	P = 2387.1	RVL = 4.8238		
SECTION 1: RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV .3170 .4120 .5070 .6020 .6970 .7920	X/CV						
.709 -.2189 -.2099 -.1982 -.2035 -.2355 -.2551	.757 -.2156 -.2002 -.1869 -.1957 -.0900 -.2504	.805 -.2077 -.1999 -.1797 -.1840 -.2226 -.2490	.887 -.1698 -.1788 -.1548 -.1590 -.2101 -.2468	.963 -.1955 -.1421 -.0928 -.0907 -.1522 -.1966			
ALPHA (3) = 4.077	BETA (1) = .160	MACH = .59680	O = 595.04	P = 2386.4	RVL = 4.8327		
SECTION 1: RIGHT HAND INSIDE	DEPENDENT VARIABLE CP						
Z/BV .3170 .4120 .5070 .6020 .6970 .7920	X/CV						
.709 -.2168 -.2016 -.1946 -.2049 -.2355 -.2538	.757 -.2149 -.1920 -.1937 -.1899 -.0000 -.2498	.805 -.2049 -.1669 -.1746 -.1793 -.2232 -.2533	.887 -.1631 -.1654 -.1538 -.1544 -.2077 -.2513	.963 -.1895 -.1339 -.0859 -.0784 -.1461 -.2014			

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TABULATED PRESSURE DATA - DAIVB (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C ORB SPEED BRAKE
ALPHA (4) = 8.047 BETA (1) = .158 MACH = .59710 O = 595.63 P = 2386.4 RVL = 4.8284
SECTION : URIGHT HAND INSIDE
Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CY

.7CB -.2170 -.2012 -.1928 -.1938 -.2315 -.2462
.757 -.2131 -.1893 -.1838 -.1904 -.0000 -.2432
.825 -.2040 -.1816 -.1718 -.1783 -.2185 -.2496
.637 -.1683 -.1722 -.1491 -.1479 -.2052 -.2430
.953 -.1665 -.1355 -.0964 -.0753 -.1357 -.1934
ALPHA (5) = 12.045 BETA (1) = .156 MACH = .59710 O = 595.63 P = 2386.4 RVL = 4.8340
SECTION : URIGHT HAND INSIDE
Z/BV .3170 .4120 .5070 .6020 .6970 .7920
X/CY

.7CB -.2089 -.1994 -.1842 -.1951 -.2195 -.2400
.757 -.2083 -.1921 -.1748 -.1887 -.0000 -.2348
.825 -.2051 -.1811 -.1561 -.1751 -.2153 -.2355
.637 -.1851 -.1637 -.1465 -.1451 -.1979 -.2259
.953 -.1876 -.1265 -.0822 -.0755 -.1297 -.1726

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(DA148) -14CA/B/C/R ORB VERTICAL

REFERENCE DATA

CENTER = 2690.0000 SO. FT.	X _{MP} = 1076.5000 IN. X0
LEEF = .47-.6000 IN.	Y _{MP} = .0000 IN. Y0
ESEEF = 936.0680 IN.	Z _{MP} = 375.0000 IN. Z0
SCALE = .0300	

ALPHA (1) = -.093 BETA (1) = -3.881 MACH = 1.3933 0 = 599.80 P = 441.36 RNL = 2.9078

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z,BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X,CY	.7314	.6695	.6432	.6809	.6317
1.225	.6130	.5192	.4672	.5967	.6320
1.253	.6237	.5163	.4591	.5957	.6162
1.265	.5243	.4213	.3930	.5823	.5493
1.322	.3233	.2325	.3763	.5924	.5124
1.623	.2191	.1322	.5743	.6547	.5170
1.638	-.3321	.5104	-.7134	.6447	-.1969
1.716	-.3325	.2931	.5530	.5859	.4894
1.913	.3535	.4728	.4956	.4639	.2136
A_ALPHA (1) = -.093 BETA (2) = .154 MACH = 1.3933 0 = 599.80 P = 441.36 RNL = 2.9078					
SECTION (2) VERTICAL DEPENDENT VARIABLE CP					
Z,BV .1580 .3170 .4590 .6020 .6970 .8390 .9250					
4,C4	.8392	.7428	.7040	.6610	.6055
1.255	.2911	.1563	.0254	.0189	.1563
1.269	.4659	.3564	.0805	.0385	.1795
1.283	.4343	.2732	.2230	.3016	.4612
1.303	.2911	.2125	.2005	.5145	.4765
1.503	.1263	.1113	.5707	.5161	.5012
1.585	-.3592	.4213	-.1603	.6402	.6163
1.775	-.2635	.2373	.4641	.5546	.4705
1.900	.2316	.2316	.3790	.4378	.22713

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (1) = -4.099 BETA A (3) = 4.236 MACH = 1.3933 O = 599.80 P = 441.36 RN/L = 2.9078

SECTION 1: VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .025 .7623 .6657 .6149 .5487 .4295
.025 .0932 -.0750 -.2737 -.3852 -.2622
.150 -.1139 -.0803 -.3035 -.3662 -.2375
.150 .2112 .0326 -.0721 -.3176 -.1569
.250 .2097 .0796 .0289 .1985 -.0265
.250 .0414 .0085 .3163 -.1644 .4620 .3852
.685 -.3820 .3163 .3106 .4353 .4918 .4820
.750 -.3946 .3216 .3779 .4431 .4966 .3899
.750 .3322 .3289 .3877 .3543 .4120 .2062
ALPHA (2) = -.076 BETA A (1) = -3.908 MACH = 1.3937 O = 599.50 P = 440.89 RN/L = 2.9103

SECTION 1: VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .1500 .7135 .5873 .5594 .5625 .5578
.225 .2290 .4460 .3846 .4505 .5477
.150 .1645 .1445 .3932 .4656 .5345
.150 .1509 .1340 .3142 .4968 .4816
.200 .1572 .1572 .2715 .5305 .4585
.620 .1524 .1353 .6038 .6050 .5041
.685 .1329 .1379 .1608 .6523 .6358 .5891
.750 .13475 .13475 .2668 .4968 .5355 .4586
.750 .2695 .4128 .4517 .4228 .2587 .3456
ALPHA (2) = -.077 BETA A (2) = -1.47 MACH = 1.3937 O = 599.50 P = 440.89 RN/L = 2.9103

SECTION 1: VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .100 .7545 .5711 .6248 .5653 .4806
.225 .2214 .0991 .0110 .0230 .0592
.250 .4302 .3006 .3222 -.0065 -.0197
.50 .3752 .2160 .1657 .1654 .3415
.200 .2251 .1485 .1418 .4259 .4167
.600 .1373 .1250 .1716 .5469 .4576
.675 .1366 .12526 .1556 .5515 .5597 .1913
.750 .1284 .1230 .3856 .4643 .4802 .4408
.750 .13755 .1230 .3856 .4643 .4802 .4408
.750 .1562 .1562 .3087 .3087 .3865 .2396
ALPHA (2) = -.077 BETA A (2) = -1.47 MACH = 1.3937 O = 599.50 P = 440.89 RN/L = 2.9103

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

(XEB01)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA : 2) = - .058 BETA (3) = 4.215 MACH = 1.3937 Q = 593.50 P = 440.89 RNL = 2.9103
AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

Z / BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X / CV

X / CV	.000	.6934	.5975	.5410	.4690	.3551
.025	-.0249	-.1424	-.3072	-.4871	-.4341	
.050	-.0570	-.1379	-.3416	-.4694	-.4238	
.150	.1463	-.0260	-.1100	-.3557	-.3241	
.300	.1469	.0474	-.0703	.2046	.0629	
.520	-.0098	-.0458	.2381	.3857	.3680	
.685	-.4163	.2535	-.1599	.4048	.4243	
.775	-.3950	.1572	-.3029	.2556	.2744	
.900	.0637	.2192	.3170	.2967	.2005	

ALPHA (3) = 3.825 BETA (1) = -3.904 MACH = 1.3940 Q = 600.01 P = 441.12 RNL = 2.9032

SECTION (1) VERTICAL

Z / BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X / CV

X / CV	.000	.6240	.5219	.4951	.4581	.4777
.025	.3785	.3615	.3029	.3189	.4440	
.050	.4201	.3658	.3032	.3198	.4493	
.150	.3429	.2721	.2428	.3651	.4160	
.300	.2331	.1977	.1921	.5134	.3845	
.520	.0820	.0795	.5277	.5475	.4421	
.685	-.6415	.3751	-.1720	.5732	.5221	
.775	-.3556	.2625	.4019	.4672	.4803	
.900	.1979	.3408	.4004	.5766	.2336	

ALPHA (3) = 3.826 BETA (2) = -146 MACH = 1.3940 Q = 600.01 P = 441.12 RNL = 2.9032

SECTION (1) VERTICAL

Z / BV -.1520 .3170 .4590 .6020 .6970 .8390 .9250

X / CV

X / CV	.009	.6693	.5953	.5359	.4672	.3861
.025	-.1673	.0645	-.0520	-.0589	-.1208	
.050	.3259	.2585	-.0317	-.0561	-.0784	
.150	.3236	.1655	.1090	.1047	.1933	
.200	.672	.0312	.0863	.3303	.3306	
.520	.3176	-.2937	-.1644	.4660	.3906	
.685	-.4355	.1654	.4707	.4754	.2112	
.775	-.3575	.3133	.3847	.4176	.3866	
.900	.1016	.2360	.3200	.3258	.2093	

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

ALPHA (3) = 3.827 BETA (3) = 4.205 MACH = 1.3940 0 = 600.01 P = 441.12 RNL = 2.9038
 SECTION 11 VERTICAL
 Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV DEPENDENT VARIABLE CP

.200	.5931	.5383	.4584	.3731	.2819
.025	-.0815	-.1681	-.3504	-.4939	-.4674
.050	.0116	-.1456	-.3781	-.4806	-.4549
.150	.1046	-.0395	-.1509	-.3700	-.4221
.300	.1002	-.0119	-.0989	-.0941	-.0784
.520	-.0712	-.1005	.1908	.3297	.2944
.685	-.3796	.1787	.1707	.3149	.3198
.775	-.3701	.0923	.2257	.2927	.2020
.950	.0138	.1540	.2452	.2452	.1698

ALPHA (4) = 7.859 BETA (1) = -3.903 MACH = 1.3935 0 = 599.60 P = 441.12 RNL = 2.9058
 SECTION 11 VERTICAL
 Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV DEPENDENT VARIABLE CP

.500	.5350	.4352	.4252	.3755	.3729
.125	-.2433	-.2822	-.2285	.2400	.3011
.150	.3861	.3019	.2309	.2395	.3285
.200	.2771	.2123	.1774	.2552	.3576
.450	.1779	.1233	.1335	.4390	.3295
.520	.0350	.0328	.4538	.4867	.5923
.665	-.1419	.3575	.1830	.4968	.4555
.775	-.3924	.2327	.3360	.4218	.3631
.950	.1552	.2629	.3397	.3221	.2056

ALPHA (4) = -3.959 BETA (2) = -143 MACH = 1.3935 0 = 599.60 P = 441.12 RNL = 2.9058
 SECTION 11 VERT. CP
 Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV DEPENDENT VARIABLE CP

.320	.6979	.5236	.4469	.3755	.3032
.025	-.1853	.0234	-.1010	-.1072	-.1673
.050	.3470	.2013	-.0965	-.1189	-.1245
.150	.2231	.1091	.0512	.0427	.0472
.300	.1063	.0311	.0238	.2264	.2601
.520	-.0553	-.0596	.2953	.3877	.3226
.685	-.4298	.2227	.1705	.3911	.4011
.775	-.3522	.1341	.2458	.3166	.3325
.950	.0496	.0496	.1768	.2534	.1746

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

(XEBV011)

ALPHA (5) = 11.909 BETA (3) = 4.219 MACH = 1.3941 Q = 599.51 P = 440.65 RNL = 2.9230

SECTION 1 : VERTICAL

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6445 .4765 .3143 .2129 .1699

.0225 .1331 -.1504 -.3590 -.4701 -.4560

.350 .1791 -.1380 -.3921 -.4737 -.4524

.150 .1998 -.0380 -.1991 -.3298 -.4060

.300 .0429 -.0795 -.1566 -.0906 -.0695

.520 -.1473 -.1795 -.0423 -.1795 -.1503

.595 -.4271 -.0546 -.2349 -.2408 -.1998

.775 -.3802 -.0104 -.0932 -.1771 -.2779

.300 -.0672 .0431 .1232 .1817 .1244

.775 -.1231 .0431 .1232 .1614 .1244

.300 -.0672 .0431 .1232 .1614 .1244

ALPHA (6) = 15.872 BETA (1) = -3.862 MACH = 1.3935 Q = 599.60 P = 441.12 RNL = 2.9239

SECTION 1 : VERTICAL

Z/BV .1582 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .7710 .5264 .3294 .2405 .2283

.000 -.1623 .1436 .1369 .1345 .1363

.225 -.0124 .2579 .1405 .1300 .1550

.350 -.2123 .1978 .0795 .1046 .2020

.150 -.0090 -.0204 .0201 .1770 .2806

.520 -.0981 -.1112 .2585 .4010 .3220

.595 -.4217 .2255 -.1631 .4321 .3819

.775 -.2781 .2394 .3287 .3492 .2996

.300 .1447 .2659 .2907 .2587 .1704

.775 -.2781 .2394 .3287 .3492 .2996

.300 .1447 .2659 .2907 .2587 .1704

ALPHA (5) = 15.886 BETA (2) = .149 MACH = 1.3935 Q = 599.60 P = 441.12 RNL = 2.9239

SECTION 2 : VERTICAL

Z/BV .1582 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .7351 .5015 .3258 .2371 .1848

.125 -.1907 -.0203 -.1570 -.1671 -.2156

.350 .3430 .1538 -.1601 -.1787 -.1766

.2771 .0552 -.0313 -.0423 -.0512

.150 .0521 -.0413 -.0707 -.0092 .1374

.520 -.1253 -.1350 .1452 .2635 .2006

.595 -.4522 -.1459 -.1470 .2945 .2730

.775 -.2937 .0719 .1630 .2225 .2330

.300 -.3010 .1112 .1662 .1676 .1178

.775 -.2937 .0719 .1630 .2225 .2330

.300 -.3010 .1112 .1662 .1676 .1178

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TABULATED PRESSURE DATA - OA149 (AMES 11-073-1)

AMES 11-073(OA149) -140A/B/C/R ORB VERTICAL

ALPHA (6) = 15.901 BETA (3) = 4.249 MACH = 1.3935 Q = 599.60 P = 441.12 R/L = 2.9239

SECTION (1) VERTICAL

X/CY	Z/BV	DEPENDENT VARIABLE CP
.000	.7724	.5343
.025	.1610	-.1604
.050	.2711	-.1190
.150	.2868	.006C
.300	.0713	-.0816
.520	-.1468	-.1918
.695	-.4628	.0567
.775	-.4063	-.0118
.900	-.0830	.0172

(XEBV01)

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R O&B VERTICAL

REFERENCE DATA

SREF =	26900.0000 SQ.FT.	XMRP =	1076.6800 IN. X0
LREF =	.474.8000 IN.	YMRP =	.0000 IN. Y0
BREF =	936.0680 IN.	ZMRP =	.375.0000 IN. Z0
SCALE =	.0300		

ALPHA (1) = -4.081 BETA (1) = -3.888 MACH = 1.2475 0 = 599.57 P = 550.40 RNL = 3.0108

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.020	.7735	.6253	.6050	.6380	.5703		
.025	.6052	.4631	.4214	.5805	.5897		
.050	.5109	.4648	.4136	.5807	.5691		
.150	.4921	.2571	.3615	.5401	.4948		
.300	.3285	.2811	.4358	.5317	.4516		
.520	.1636	.1562	.6127	.5714	.4171		
.555	-.3226	.5012	-.1389	.6306	.5754	-.2924	
.775	-.2512	.3352	.5088	.5317	.5114	.3909	-.3042
.900		.3162	.4026	.4098	.3754	.1620	-.4047

ALPHA (1) = -4.075 BETA (2) = -154 MACH = 1.2475 0 = 599.57 P = 550.40 RNL = 3.0108

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.020	.9219	.6931	.6646	.6842	.6561		
.025	.2932	.0915	-.0267	.1377	.1514		
.050	.4516	.3021	.0489	.2111	.2456		
.150	.3881	.2184	.1660	.3985	.4063		
.200	.2224	.1474	.1594	.4589	.4166		
.520	.622	.0625	.5533	.5549	.4036		
.655	-.4365	.2773	-.1312	.5860	.5535	-.2961	
.775	-.2425	.3573	.4461	.4891	.3738	-.3284	
.900		.2143	-.3475	.3780	.3542	.1493	-.3842

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(IXEV02) (13 AUG 75)

PARAMETRIC DATA

RUDDER =	.000	SPDRX =	55.000
EDEFLAP =	16.300	L-ELVN =	.000
R-ELVN =	.000	MACH =	1.250

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

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ALPHA (1) = -4.083 BETA (1) = 4.234 MACH = 1.2475 Q = 599.57 P = 550.40 RNL = 3.0108
 SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV
 .000 .7589 .6203 .5766 .4802 .3690
 .025 .0908 -.1614 -.3532 -.3690 -.1169
 .050 .1169 -.1453 -.3845 -.3632 -.1078
 .150 .2112 -.0005 -.1278 -.3122 -.1021
 .300 .1405 .0206 -.0547 -.0774 -.1667
 .520 -.0222 -.0574 -.3215 .5282 .0976
 .685 -.4832 .2736 -.1381 .3998 .5357 -.1785
 .775 -.3955 .1765 .3517 .3917 .4079 .3632 -.2663
 .900 .1C98 .2515 .3230 .2817 .1321 -.3387

ALPHA (2) = -.037 B. A (1) = -.3.909 MACH = 1.2477 Q = 599.51 P = 550.16 RNL = 3.0131
 SECTION (1) VERTICAL

Z/BV .1593 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV
 .000 .7051 .5522 .5229 .5530 .4879
 .025 .5255 .3937 .3395 .4969 .5176
 .050 .5403 .3842 .3308 .4862 .4972
 .150 .4243 .2912 .2621 .4645 .4298
 .350 .2632 .2055 .1959 .4709 .3914
 .520 .0920 .0787 .0532 .5305 .3797
 .695 -.4438 -.4044 -.1299 .5690 .5232 -.3036
 .775 -.3196 .2991 .4517 .4752 .4587 .3601 -.3452
 .900 .2531 .3594 .3652 .3313 .1376 -.4374

ALPHA (2) = -.032 BETA (2) = .147 MACH = 1.2477 Q = 599.51 P = 550.16 RNL = 3.0131
 SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV
 .000 .7658 .6245 .5830 .5341 .5377
 .025 .22250 .0356 -.0932 -.1006 .0837
 .050 .3899 .2420 -.0376 -.0868 .1449
 .150 .3339 .1525 .1011 .3026 .3375
 .300 .1651 .0918 .0770 .3968 .3576
 .520 .0002 -.0146 .4639 .4968 .3730
 .685 -.4940 .3070 .1179 .5131 .4923 .3202
 .775 -.3490 .1601 .3524 .4255 .4338 .3390 -.3645
 .900 .1258 .2740 .3300 .3097 .1204 -.4211

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

$$\text{ALPHA} + 2) = -0.38 \quad \text{BETA} + 3) = 4.211 \quad \text{MACH} = 1.2477 \quad Q = 599.51 \quad P = 550.16 \quad RN/L = 3.0131$$

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z-BY -1580 .3170 .4590 .6020 .6970 .8390 .9250

X/VCV

.6910	.5546	.4980	.4175	.2831
-.0074	-.1989	-.3839	-.5102	-.2988
.0257	.960	-.4187	-.5083	-.2814
.053	.1450	-.0731	-.1886	-.3409
.150	.0529	-.0193	-.1289	-.0810
.180	-.0771	-.131	-.2475	-.1747
.180	-.5523	.211	.3602	.3874
.185	-.3255	.1945	.3599	.2354
.190	.0243	.1799	.2733	.2305

$$\text{ALPHA} + 3) = 3.858 \quad \text{BETA} + 1) = -3.910 \quad \text{MACH} = 1.2468 \quad Q = 599.65 \quad P = 551.10 \quad RN/L = 3.0140$$

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z-BY -1580 .3170 .4590 .6020 .6970 .8390 .9250

X/VCV

.6953	.4913	.4530	.4125
.2513	.2524	.3766	.4147
.2513	.2517	.3824	.4185
.2513	.2251	.1865	.3845
.2513	.1951	.1579	.4070
.2513	.0152	.4967	.3274
.2513	.2241	.5252	.4772
.2513	.2239	.3780	.3619
.2513	.1740	.4206	.3559

$$\text{ALPHA} + 3) = 3.259 \quad \text{BETA} + 2) = .139 \quad \text{MACH} = 1.2468 \quad Q = 599.65 \quad P = 551.10 \quad RN/L = 3.0140$$

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z-BY -1580 .3170 .4590 .6020 .6970 .8390 .9250

X/VCV

.6954	.4957	.4380	.3626
.0052	-.1911	-.383	-.1395
.2401	.398	-.0950	-.0431
.1869	.0207	.0376	.0900
.1134	-.0590	.0176	.2683
.1267	-.2379	.3749	.3255
.1635	.2800	.4357	.2992
.1630	.1252	.3518	.4297
.1630	.3549	.2011	.3236

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TABULATED PRESSURE DATA - OR148 (AMES 11-073-1)

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ALPHA (4) = 7.841 BETA (3) = 4.209 MACH = 1.2465 0 = 599.60 P = 551.34 RNL = 3.0137

SECTION : 11 VERTICAL

DEPENDENT VARIABLE CP

Z'BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6345 .4677 .3495 .2547 .1399
.025 -.0897 -.2388 -.4512 -.5949 -.5569
.050 .1364 -.2124 -.4913 -.5891 .5254
.150 .1509 -.0737 -.2548 -.3677 -.4159
.300 -.0178 -.1175 -.1758 -.0118 -.1035
.500 -.1891 -.2233 -.1440 .2454 .1708
.650 -.1481 .0818 -.1494 .2626 .2783 -.2456
.750 -.4653 -.3119 .1245 .2065 .2201 .2208 -.3508
.775 -.3597 .0575 .1492 .1488 .0605 -.4348

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL (XEV02)

ALPHA (5) = 11.342 BETA (1) = -3.887 MACH = 1.2452 0 = 599.20 P = 552.04 RNL = 3.0172

SECTION : 11 VERTICAL

DEPENDENT VARIABLE CP

Z'BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .5746 .4351 .3106 .2527 .2596
.010 .2619 .1850 .1201 .1586 .2990
.030 .2528 .2082 .1215 .1689 .2930
.100 .2138 .1245 .0658 .2372 .2445
.150 .1354 .0555 .0257 .3235 .2078
.180 .0849 -.0817 .0255 .3720 .2611
.200 .0517 .2219 .1472 .3923 .3369 -.3490
.210 .0529 .1615 .2750 .3147 .2354 .4143
.220 .0782 .2040 .2040 .2379 .1987 .0621 .5211

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL (XEV02)

ALPHA (5) = 11.352 BETA (2) = -1.48 MACH = 1.2452 0 = 599.20 P = 552.04 RNL = 3.0172

SECTION : 11 VERTICAL

DEPENDENT VARIABLE CP

Z'BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .0163 .4456 .3391 .2602 .1780
.030 .1876 .5573 .2229 .2255 .2772
.050 .7699 .1143 .1679 .2343 -.2390
.070 .2251 .0072 .0648 .0724 .0921
.100 .1534 .0763 .0958 .1812 .1756
.120 .1584 .1324 .2240 .2977 .2159
.140 .1484 .1324 .1365 .3063 .3014 -.3609
.160 .1485 .1324 .1557 .2252 .2503 .2169 .3985
.180 .1503 .0925 .1607 .1559 .0388 -.5063

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL
ALPHA₄ (5) = 11.946 BETA₄ (3) = 4.215 MACH = 1.2452 Q = 599.20 P = 552.04 PN/L = 3.0172
(XE8V02)

SECTION 1 VERTICAL		DEPENDENT VARIABLE CP						
Z/V	X/CV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
.50	.6650	.4286		.2764		.1647		.4748
.625	.0857	-.2412		-.4594		-.5886		-.5735
.750	.1356	-.2245		-.4957		-.5840		-.5531
.875	.1590	-.1043		-.2835		-.3635		-.4405
.100	.0337	-.1532		-.2080		-.0812		-.0004
.125	.2195	-.2543		.0843		.1759		.0952
.150	.5084	.0336	-.1530	.2090	.1647	.2227		.2554
.175	.4213	-.0505	.0719	.1472	.1489	.1824		.3675
.200		-.1213	-.0004	.0843	.1038	.0301		.4503

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TABULATED PRESSURE DATA - DATA 14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

PAGE 6560
(XEBV03) 1 13 AUG 75 1

REFERENCE DATA

SREF	= 2630.0000 SQ.FT.	XMRP	= 1076.9800 IN. X0	RUDDER = .000	SPDBRK = 55.000
LREF	= 474.6000 IN.	YMRP	= .0000 IN. Y0	BDFLAP = 16.300	L-ELVN = .000
BREF	= 925.0580 IN.	ZMRP	= 375.0000 IN. Z0	R-ELVN = .000	MACH = 1.100
SCALE	= .0300				
α_{PI-A} (1)	= +4.048	β_{TA} (1) = -3.881	$MACH$ = 1.0978	P = 589.56	RNL = 3.1863

SECTION 1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	DEPENDENT VARIABLE CP
α_{PI-A} (1)	= -1.235	β_{TA} (1) = -2.1	$MACH$ = 1.0978	P = 589.56	RNL = 3.1863			
Z/BV	.002	.0326	.0733	.1244	.1654	.2064	.2474	
	.023	.0527	.1038	.1536	.2035	.2534	.3033	
	.030	.0623	.1244	.1865	.2486	.3107	.3728	
	.035	.0724	.1469	.2195	.2927	.3757	.4589	
	.040	.0825	.1669	.2412	.3257	.4109	.4964	
	.045	.0926	.1969	.2812	.3772	.4744	.5727	
	.050	.1027	.2360	.3312	.4372	.5444	.6527	
	.055	.1128	.2860	.3923	.5092	.6264	.7447	
	.060	.1229	.3460	.4603	.5875	.7037	.8219	
	.065	.1330	.4169	.5105	.6377	.7550	.8732	
	.070	.1431	.4969	.6123	.7449	.8622	.9804	
	.075	.1532	.5869	.7123	.8452	.9656	.0886	
	.080	.1633	.6869	.8123	.9480	.0562	.1667	
	.085	.1734	.7869	.9227	.0252	.3107	.5214	

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	DEPENDENT VARIABLE CP
α_{PI-A} (1)	= -1.235	β_{TA} (1) = -2.1	$MACH$ = 1.0978	P = 589.56	RNL = 3.1863			
Z/BV	.002	.0326	.0733	.1244	.1654	.2064	.2474	
	.023	.0527	.1038	.1536	.2035	.2534	.3033	
	.030	.0623	.1244	.1865	.2486	.3107	.3728	
	.035	.0724	.1469	.2195	.2927	.3757	.4589	
	.040	.0825	.1669	.2412	.3257	.4109	.4964	
	.045	.0926	.1969	.2812	.3772	.4744	.5727	
	.050	.1027	.2360	.3312	.4372	.5444	.6527	
	.055	.1128	.2860	.3923	.5092	.6264	.7447	
	.060	.1229	.3460	.4603	.5875	.7037	.8219	
	.065	.1330	.4169	.5105	.6377	.7550	.8732	
	.070	.1431	.4969	.6123	.7449	.8622	.9804	
	.075	.1532	.5869	.7123	.8452	.9656	.0886	
	.080	.1633	.6869	.8123	.9227	.0252	.3107	
	.085	.1734	.7869	.9227	.0252	.3107	.5214	

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/ ORB VERTICAL
 $\alpha_{PA} (1) = -4.044$ $\beta_{TA} (3) = 4.236$ MACH = 1.0978 Q = 599.56 P = 710.72 RNL = 3.1865

SECTION 1 INVERTICAL

Z/BV	X/CY	DEPENDENT VARIABLE CP			
.1580	.3170	.4593 .6020 .6970 .8390 .9250			
.025	.0404	.5402 .3403 .5118 .5098 .3875 .3207			
.050	.0530	.2405 .1247 .0637 .0565 .2340 .0594			
.150	.1247	.1658 .0957 .1655 .1762 .1958 .0453			
.300	.1285	.1655 .2102 .2913 .3132 .2264 .2074			
.500	.5552	.1529 .1552 .1879 .1673 .0898 .3256			
.750	.3649	.1529 .1879 .1673 .0898 .3256 .2764			
.950					

$\alpha_{PA} (2) = -.327$ $\beta_{TA} (1) = -3.903$ MACH = 1.0988 Q = 599.62 P = 709.54 RNL = 3.1868

SECTION 1 INVERTICAL

Z/BV	X/CY	DEPENDENT VARIABLE CP			
.1580	.3170	.4593 .6020 .6970 .8390 .9250			
.025	.6492	.4855 .2930 .2562 .2600 .4772 .4212			
.050	.4643	.2563 .2047 .2290 .2600 .4510 .4476			
.150	.4673	.2563 .3234 .2047 .2290 .3893 .4277			
.300	.1612	.1210 .0042 .1210 .2955 .3932 .3505			
.500	.5365	.2513 .2513 .1446 .4708 .3813 .3055			
.750	.2788	.2571 .2571 .1446 .5016 .4173 .2561			
.950					

$\alpha_{PA} (2) = -.323$ $\beta_{TA} (2) = .144$ MACH = 1.0988 Q = 599.62 P = 709.54 RNL = 3.1868

SECTION 1 INVERTICAL

Z/BV	X/CY	DEPENDENT VARIABLE CP			
.1580	.3170	.4593 .6020 .6970 .8390 .9250			
.025	.7097	.5605 .5264 .5264 .1801 .0452 .5083			
.050	.5354	.0520 .1503 .0520 .0119 .0200 .1729			
.150	.2433	.0520 .0520 .0205 .0205 .2667 .1389			
.300	.0722	.0016 .0016 .1545 .1545 .3192 .2657			
.500	.1954	.1339 .2653 .1339 .1321 .4077 .2499			
.750	.5135	.2653 .1624 .1624 .4843 .579 .4298			
.950	.2125	.1624 .1624 .3500 .3500 .2048 .4646			

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TABULATED PRESSURE DATA - OA1148 : MSES 11-073-1 ,

AME5 + 1-073(OA1148) -140A/B/C/R ORA VERTICAL

$$\text{ALPHA} (2) = .029 \quad \text{BE.A (3)} = .4209 \quad \gamma = .6988 \quad \alpha = .0531 \quad \beta = .1093 \quad \text{RNL} = 3.1368$$

SECTION 1) VERTICAL

$$Z/BV \quad .1580 \quad .3170 \quad .4590 \quad .6020 \quad .90 \quad .9250$$

X/CY

$$\begin{aligned} .000 & .6380 & .4791 & .4231 & .45 & .2057 \\ .025 & -.0427 & -.3569 & -.5381 & .72 & -.1797 \\ .050 & -.0237 & -.3014 & -.5503 & .29 & -.1646 \\ .150 & .0875 & .1217 & -.2855 & .212 & -.1595 \\ .300 & -.0249 & -.1336 & -.1872 & .371 & -.2336 \\ .520 & -.1924 & -.226+ & .2425 & .976 & -.3419 \\ .695 & -.5413 & .1360 & -.1536 & .1063 & -.3084 \\ .775 & -.3766 & .0396 & .2351 & .2163 & -.4013 \\ .820 & .0436 & .1478 & .1883 & .0419 & -.4866 \end{aligned}$$

$$\text{ALPHA (3)} = 3.993 \quad \text{BETA (1)} = -2.903 \quad \text{MACH} = 1.0982 \quad 0 = 589.43 \quad P = 710.01 \quad \text{RNL} = 3.1855$$

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

$$Z/BV \quad .1590 \quad .3170 \quad .4590 \quad .6020 \quad .6970 \quad .8390 \quad .9250$$

X/CY

$$\begin{aligned} .000 & .5113 & .4303 & .3718 & .3894 & .3343 \\ .025 & .3492 & .2152 & .1771 & .3648 & .3804 \\ .050 & .3785 & .2314 & .1723 & .3555 & .3578 \\ .150 & .2518 & .1333 & .1103 & .3260 & .2871 \\ .300 & .1076 & .0558 & .1821 & .3303 & .2581 \\ .620 & -.0544 & -.0777 & .4221 & .3839 & .2235 \\ .635 & -.6333 & .2645 & .1374 & .4226 & .3777 & -.4467 \\ .650 & -.3232 & .1776 & .5147 & .3288 & .3107 & .2013 & -.4893 \\ .675 & .1293 & .2056 & .2112 & .1718 & .0359 & .5455 \end{aligned}$$

$$\text{ALPHA (2)} = 2.69+ \quad \text{GETA (2)} = .147 \quad \text{MACH} = 1.0982 \quad 0 = 589.43 \quad P = 710.01 \quad \text{RNL} = 3.1855$$

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

$$Z/BV \quad .1580 \quad .3170 \quad .4590 \quad .6020 \quad .6970 \quad .8390 \quad .9250$$

X/CY

$$\begin{aligned} .000 & .6639 & .4546 & .4443 & .4623 & .4207 \\ .025 & .1597 & .1020 & .2339 & .0434 & -.0412 \\ .050 & .2393 & .1050 & .1346 & .0469 & .0891 \\ .150 & .2040 & .0106 & .0403 & .2034 & .2069 \\ .300 & .0151 & .0551 & .0524 & .2631 & .2165 \\ .520 & -.1351 & .1518 & .3617 & .2557 & .2035 \\ .610 & .5611 & .1916 & .1283 & .3453 & -.4401 \\ .635 & .1562 & .1523 & .2595 & .2896 & .1739 & -.4905 \\ .650 & .1367 & .1524 & .1524 & .1489 & .0635 & .5287 \end{aligned}$$

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL
SECTION 1) VERTICAL

ALPHA (3) = 3.895 BETA (3) = 4.201 MACH = 1.0982 Q = 599.43 P = 710.01 RNL = 3.1855

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.00	.5965	.4271	.3447	.2363	.1069
.025	-.6768	-.3728	-.6271	-.5829	-.2870
.050	-.3323	-.3299	-.6311	-.5640	-.2678
.150	-.0352	-.1743	-.2039	-.4647	-.2524
.300	-.0623	-.1746	-.2796	-.1525	-.3081
.520	-.2570	-.2997	-.1723	.3106	.2079
.655	-.5018	-.0568	-.1469	.2674	.3120
.775	-.3600	-.0311	-.1752	.2392	.2205
.930	-.0138	.0994	.1542	.0889	-.0731

ALPHA (4) = 7.885 BETA (1) = -3.898 MACH = 1.0976 Q = 599.10 P = 710.48 RNL = 3.1859

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6147	.3788	.2963	.3080	.2384
.025	.3460	.1469	.0914	.3135	.3363
.050	.3558	.1682	.0907	.3102	.3192
.150	.2100	.0613	.0392	.3030	.2540
.300	.0187	-.0304	.0903	.3061	.2228
.520	-.1215	-.1059	.3910	.3650	.2015
.655	-.6326	.2417	-.1280	.4271	.3263
.775	-.3563	.1396	.2951	.3239	.2887
.930	.1251	.2096	.2024	.1539	-.0477

ALPHA (4) = 7.885 BETA (2) = .144 MACH = 1.0976 Q = 599.10 P = 710.48 RNL = 3.1859

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6517	.4338	.3603	.2963	.3251
.025	.1452	-.1538	-.2897	-.2918	-.1024
.050	.2638	-.0509	-.2374	-.2930	.0193
.150	.1590	-.0492	-.1122	-.1353	.1474
.300	-.0445	-.1295	-.1406	.2110	.1664
.520	-.2053	-.2153	.2772	.3032	.1705
.655	-.5851	-.1169	-.1238	.3391	.2934
.775	-.5907	.0688	.1934	.2445	.4425
.930	.0258	.1178	.1432	.1133	-.0837

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(XEBV03)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (4) = 7.986 BETA (3) = 4.200 MACH = 1.0976 0 = 599.10 P = 710.48 RNL = 3.1859

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

(XEBV03)

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/E	X/C	BETAS	BETAS	MACH	0	P	RNL
.580	.024	.3734	.3734	.2682	.1631	.0005	
.580	.026	.3825	.3825	.6503	.7486	.4831	
.580	.0147	.3280	.3280	.6584	.7352	.4732	
.580	.0512	.2054	.2054	.3774	.4579	.5152	
.580	.1263	.2330	.2330	.3104	.0154	.2557	
.580	.3123	.3384	.3384	.1115	.2060	.1396	
.580	.5327	.1310	.1310	.2502	.1915	.3713	
.580	.4908	.0868	.0868	.1874	.1802	.1089	
.580	.1101	.0328	.0328	.1095	.0626	.4358	
.580	.0328				.0671	.4725	

ALPHA (5) = 11.990 BETA (1) = -3.881 MACH = 1.0978 0 = 599.38 P = 710.48 RNL = 3.1856

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/E	X/C	BETAS	BETAS	MACH	0	P	RNL
.580	.5464	.3537	.3537	.2300	.2224	.1382	
.580	.1972	.2586	.2586	.0505	.2899	.3155	
.580	.2262	.1132	.1132	.3492	.2810	.2908	
.580	.1475	.1550	.1550	.0011	.2658	.2211	
.580	.1273	.1270	.1270	.0287	.2777	.1826	
.580	.11553	.1343	.1343	.3745	.3216	.1857	
.580	.16269	.2217	.2217	.4003	.2670	.2847	
.580	.14324	.1054	.1054	.3110	.1517	.5134	
.580	.1520	.2236	.2236	.1883	.1286	.5800	

ALPHA (5) = 11.997 BETA (2) = .149 MACH = 1.0978 0 = 599.38 P = 710.48 RNL = 3.1855

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/E	X/C	BETAS	BETAS	MACH	0	P	RNL
.580	.1100	.1971	.1971	.2299	.2039	.2477	
.580	.3269	.2669	.2669	.3592	.3638	.1440	
.580	.1651	.1655	.1655	.2904	.3614	.0686	
.580	.1837	.1755	.1755	.1652	.0173	.1019	
.580	.1646	.1646	.1646	.1994	.1717	.1389	
.580	.1641	.0726	.0726	.2061	.2646	.1341	
.580	.1647	.1248	.1248	.2849	.2551	.4430	
.580	.1445	.1427	.1427	.2070	.2116	.1257	
.580	.0123	.0910	.0910	.1131	.0969	.5396	

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

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AMES 11-073(04148) -140A/B/C/R ORB VERTICAL
(XE8V03)

ALPHA (5) = 11.932 BETA (3) = 4.212 MACH = 1.0978 0 = 599.38 P = 710.48 RNL = 3.1856
SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.158C	-.3170	.4590	.6020	.6970	.8390	.9250	
X/CV	.000	.6305	.3570		.1959		.0548	-.1156
	.025	-.0110	-.4000		-.6582		-.7050	-.4706
	.050	.0698	-.3423		-.6505		-.7169	-.4704
	.150	.0615	-.2178		-.4063		-.4075	-.5248
	.300	-.1573	-.2697		-.3430		-.1799	-.2576
	.520	-.3478	-.3719		-.0495		.1775	-.0103
	.685	-.5707	-.0332	-.1468	.1732	-.1794	.2106	-.3514
	.775	-.4302	-.1347	.0268	.1168	.1192	.1054	-.4241
	.933	-.156+	-.0284	.0557	.0256	-.0918	-.4369	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SPEC = 650.0000 SO.RT.
 LREF = .75.0000 IN.
 RREF = .375.0000 IN.
 SCALE = .0000

ALPHA (1) = -4.058 BETA (1) = -3.880 MACH = .89913 Q = 595.67 P = 1059.7 RN/L = 3.5733

SECTION: (1)VERTICAL

Z/E = .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/C	1.000	.997	.995	.992	.989	.986	.984
Z/E	.1560	.3121	.4561	.6011	.7461	.8911	.9251
1.000	.1560	.3121	.4561	.6011	.7461	.8911	.9251
.997	.1561	.3120	.4560	.6010	.7460	.8910	.9250
.995	.1561	.3120	.4560	.6010	.7460	.8910	.9250
.992	.1561	.3120	.4560	.6010	.7460	.8910	.9250
.989	.1561	.3120	.4560	.6010	.7460	.8910	.9250
.986	.1561	.3120	.4560	.6010	.7460	.8910	.9250
.984	.1561	.3120	.4560	.6010	.7460	.8910	.9250

ALPHA (2) = -4.036 BETA (2) = .153 MACH = .89913 Q = 595.67 P = 1059.7 RN/L = 3.5733

SECTION: (2)VERTICAL

Z/E = .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/C	1.000	.999	.997	.995	.992	.989	.986
Z/E	.1560	.3120	.4560	.6010	.7460	.8910	.9250
1.000	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.999	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.997	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.995	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.992	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.989	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.986	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.984	.1560	.3120	.4560	.6010	.7460	.8910	.9250

SECTION: (3)VERTICAL

Z/E = .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/C	1.000	.999	.997	.995	.992	.989	.986
Z/E	.1560	.3120	.4560	.6010	.7460	.8910	.9250
1.000	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.999	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.997	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.995	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.992	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.989	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.986	.1560	.3120	.4560	.6010	.7460	.8910	.9250
.984	.1560	.3120	.4560	.6010	.7460	.8910	.9250

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(XEBV04) (13 AUG 75)

PARAMETRIC DATA

RUDDER	.000	SPDBRK	.55.000
BDFLAP	.16.300	L-ELVN	.000
R-ELVN	.000	MACH	.900

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TABULATED PRESSURE DATA - OA-48 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL (XEBV04)						
ALPHA (1) = -4.047	BETA (3) = 4.237	MACH = .89913	Q = 599.67	P = 1059.7	RNL = 3.5733	
SECTION (1) VERTICAL						
Z/BV	.1590	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.000	.4875	.3526	.3469	.3028	.2340
	.025	-.1627	-.6680	-.5558	-.1871	.1528
	.050	-.1097	-.5903	-.5448	-.1847	.1342
	.150	-.1452	-.3108	-.5027	-.1931	.1205
	.300	-.2278	-.3020	-.2643	-.2059	.1516
	.520	-.3550	.0044	.2654	-.1030	.3062
	.695	-.3679	.2319	.2007	.3825	.1466
	.775	-.1593	.0966	.1894	.2245	.2152
	.900		.3315	.0192	.0442	.0570
ALPHA (2) = -.025	BETA (1) = -3.97	MACH = .89927	Q = 599.10	P = 1060.7	RNL = 3.5698	
SECTION (1) VERTICAL						
Z/BV	.1590	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.000	.4418	.2745	.3142	.4089	.3497
	.025	.3178	.1974	.3538	.3987	.3403
	.050	.2933	.1324	.3219	.3770	.3166
	.150	.1510	.1038	.2758	.2980	.2286
	.300	.0339	.0493	.2706	.2615	.1574
	.520	-.1562	.3318	.3512	.2939	.0627
	.695	-.2423	.2345	.1776	.3895	.2471
	.775	-.2195	.3866	.2661	.2355	.1981
	.900			.0916	.0559	.0025
ALPHA (2) = -.020	BETA (2) = 144	MACH = .89927	Q = 599.13	P = 1060.7	RNL = 3.5698	
SECTION (1) VERTICAL						
Z/BV	.1590	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.000	.5279	.3881	.5044	.5077	.4060
	.025	.0021	-.2984	-.1915	-.0564	-.1387
	.050	.1170	.5530	.0599	.1013	.0542
	.150	.0112	-.0951	.0843	.1427	.1076
	.300	-.1337	-.1153	.1553	.1745	.0927
	.520	-.2579	.0675	.2977	.2436	.0482
	.695	-.2802	-.2773	-.1704	.3092	.2224
	.775	-.2163	.1487	.2191	.1919	.1611
	.900		.0305	.0449	.0164	-.0327

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (2) = -.027 BETA (3) = .4215 MACH = .89827 Q = .599.10 P = .1060.7 RNL = .35698
 SECTION: 1 VERTICAL
 Z/EY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.000	.4322	.2753	.2588	.2199	.1455		
.025	-.2621	-.7301	-.5977	-.2120	-.1698		
.050	-.1745	-.6444	-.5563	-.2094	-.1568		
.075	-.1932	-.3650	-.5398	-.2141	-.1438		
.100	-.2930	-.3801	-.2942	-.2266	-.1789		
.125	-.4440	.105	-.2014	-.2572	-.1199		
.150	-.2655	-.2165	-.3399	.1914	-.3161		
.175	-.2235	.0847	-.1650	.1842	-.3147		
.200	-.0392	-.0005	.0049	.0286	-.3133		
ALP-A (3) = 3.893 BETA (2) = -3.912 R-H = .89833 Q = .598.89 P = .1060.2 RNL = .35704 SECTION: 1 VERTICAL Z/EY .1590 .3170 .4590 .6020 .6970 .8390 .9250 X/CY							
.000	.2897	.2259	.2328	.3311	.2733		
.025	.2461	.1467	.3375	.3599	.3137		
.050	.2341	.1509	.3072	.3511	.2922		
.075	.1052	.0789	.2584	.2748	.1390		
.100	.0125	.0162	.2541	.2371	.1340		
.125	.1662	.1421	.3254	.2514	.0418		
.150	.1244	.3367	.3547	.3192	.2128		
.175	.2136	.2691	.2131	.1708	.0037		
.200	.0630	.0795	.0366	.0209	.1602		

ALP-B (3) = 3.366 BTA (2) = .152 MACH = .89833 Q = .598.89 P = .1060.2 RNL = .35704
 SECTION: 1 VERTICAL
 Z/EY .1590 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.000	.4358	.3357	.4509	.4461	.3397		
.025	-.2612	-.3532	-.1804	-.0704	-.1327		
.050	-.1731	-.0563	.0417	.1071	.0359		
.075	-.1932	-.1650	.0552	.1125	.0768		
.100	.1152	.1353	.1338	.1418	.0632		
.125	.1653	.1253	.1320	.1457	.0778		
.150	.2152	.1617	.2691	.2057	.0178		
.175	.0653	.1931	.3051	.1543	.1834		
.200	.0229	.0151	.0540	.1242	.2688		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (3) = 3.899		BETA (3) = 4.208		MACH	= .89833	Q	= 598.39	P	= 1060.2	RNL	= 3.5704
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP									
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CY											
.000	.3747	.2310		.1773		.1542		.0628			
.025	.2918	.7478		.5647		.2174		.1825			
.050	.2059	.7031		.5416		.2103		.1688			
.150	.2071	.4271		.5423		.2141		.1554			
.300	.3485	.4102		.3202		.2348		.1978			
.520	.4912	.0198		.2344		.1327		.3122			
.625	.2707	.2229		.1647		.1702		.1644			
.775	.2340	.3938		.1454		.1661		.1867			
.900	.0231	.0231		.0222		.0211		.0039			
ALPHA (4) = 7.895	BETA (1) = -3.903	MACH = -3.903									
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP									
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CY											
.000	.3430	.1655		.1857		.2656		.2028			
.025	.1809	.1114		.2955		.3313		.2736			
.050	.1920	.1138		.2658		.3134		.2511			
.150	.0526	.0342		.2274		.2827		.1562			
.320	.0618	.0147		.2262		.2071		.0974			
.520	.2050	.1120		.2591		.2229		.0143			
.625	.2696	.3323		.1574		.2850		.1770			
.775	.2310	.2166		.2510		.1825		.1374			
.900	.1102	.0781		.0209		.0486		.1865			
ALPHA (4) = 7.900	BETA (2) = 1.40	MACH = 1.40									
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP									
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CY											
.000	.4637	.2688		.3914		.3867		.2705			
.025	.1222	.3420		.2091		.0803		.1547			
.050	.0311	.1345		.0103		.1051		.0130			
.150	.0777	.1681		.0464		.0867		.0524			
.320	.2051	.1674		.1207		.1147		.0372			
.625	.3091	.5429		.2421		.1701		.0120			
.688	.2573	.2591		.1541		.2301		.1435			
.775	.2165	.1735		.1927		.1393		.0968			
.900	.1743	.0245		.0275		.0865		.2355			

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INTEGRATED PRESSURE DATA - CHIEF (AMES 11-073-1)

AMES 11-07310A1481 - 140A/B/C/R CRB VERTICAL

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(XEBV35)

11-07310A1481 : 11 = -7.930 MACH = .59552 0 = 562.56 P = 2387.2 RN/L = 4.8092

DEPENDENT VARIABLE CP

11-07310A1481 : 21 = 3.70	11-07310A1481 : 21 = 4.590	11-07310A1481 : 21 = 5.020	11-07310A1481 : 21 = 6.970	11-07310A1481 : 21 = 8.390	11-07310A1481 : 21 = 9.250
-2.954	-4.992	-4.637	-4.030		
.4100	.4560	.4528	.3777		
.3650	.3650	.3603	.3302		
.3500	.3500	.3500	.2489		
.3450	.3450	.3450	.2627		
.3400	.3400	.3400	.1667		
.3350	.3350	.3350	.2575		
.3300	.3300	.3300	.0611		
.3250	.3250	.3250	.2199		
.3200	.3200	.3200	.1307		
.3150	.3150	.3150	.0746		
.3100	.3100	.3100	.1309		
.3050	.3050	.3050	.0253		
.3000	.3000	.3000	.1178		

11-07310A1481 : 21 = 3.896 MACH = .59552 0 = 562.56 P = 2387.2 RN/L = 4.8092

DEPENDENT VARIABLE CP

11-07310A1481 : 3.70	11-07310A1481 : 4.590	11-07310A1481 : 5.020	11-07310A1481 : 6.970	11-07310A1481 : 8.390	11-07310A1481 : 9.250
-2.954	-4.992	-4.637	-4.030		
.4100	.4560	.4528	.3777		
.3650	.3650	.3603	.3302		
.3500	.3500	.3500	.2489		
.3450	.3450	.3450	.2627		
.3400	.3400	.3400	.1667		
.3350	.3350	.3350	.2575		
.3300	.3300	.3300	.0611		
.3250	.3250	.3250	.2199		
.3200	.3200	.3200	.1307		
.3150	.3150	.3150	.0746		
.3100	.3100	.3100	.1309		
.3050	.3050	.3050	.0253		
.3000	.3000	.3000	.1178		

11-07310A1481 : 3.70 = 4.44 MACH = .59552 0 = 562.56 P = 2387.2 RN/L = 4.8092

DEPENDENT VARIABLE CP

11-07310A1481 : 3.70	11-07310A1481 : 4.590	11-07310A1481 : 5.020	11-07310A1481 : 6.970	11-07310A1481 : 8.390	11-07310A1481 : 9.250
-2.954	-4.992	-4.637	-4.030		
.4100	.4560	.4528	.3777		
.3650	.3650	.3603	.3302		
.3500	.3500	.3500	.2489		
.3450	.3450	.3450	.2627		
.3400	.3400	.3400	.1667		
.3350	.3350	.3350	.2575		
.3300	.3300	.3300	.0611		
.3250	.3250	.3250	.2199		
.3200	.3200	.3200	.1307		
.3150	.3150	.3150	.0746		
.3100	.3100	.3100	.1309		
.3050	.3050	.3050	.0253		
.3000	.3000	.3000	.1178		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL						
ALPHA (2) =	.008	BETA (4) =	4.214	MACH =	.59552	P = 592.56
SECTION 1: VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.3028	.1452		.1903		-.0035 -.0035
	-.3153	-.5215		-.4114		-.3994 -.7827
	-.350	-.2807	-.4790	-.3597		-.3729 -.6367
	.150	-.2494	-.3583	-.2678		-.3396 -.2966
	.300	-.2213	-.2155	-.1307		-.0881 -.0551
	.520	-.3217	-.0295	.0630		.0915 -.0341
	.625	-.2879	-.1263	-.1426		.1261 -.2436
	.775	-.2523	.0236	.0411		-.0230 -.0152
	.900	-.1845	-.1853	-.1853		-.1962 -.2260
						-.1043 -.2025
ALPHA (2) =	.003	BETA (5) =	8.269	MACH =	.59552	P = 592.56
SECTION 1: VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.0899	-.4986		.3985		-.3838 -.2604
	-.6160	-.9781		-.7037		-.4959 -.3892
	-.6233	-.8548		-.6970		-.4964 -.3733
	.150	-.7653	-.9535	-.6655		-.4856 -.3314
	.300	-.3537	-.4222	-.6143		-.4764 -.2956
	.520	-.7541	-.1018	-.3480		-.3321 -.2806
	.685	-.2950	-.0441	-.1527		-.2205 -.2325
	.775	-.2617	-.0423	-.0423		-.1606 -.2497
	.900	-.2000	-.2230	-.2230		-.1931 -.2503
						-.2088 -.2588
ALPHA (3) =	3.907	BETA (1) =	-7.936	MACH =	.59500	P = 591.74
SECTION 1: VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	-.0686	-.3743		-.3783		-.1557 -.1365
	.4095	-.3699		.4429		.4243 .3573
	.3665	-.3276		.4162		.3954 .3283
	.150	-.2203	-.2145	.3212		.3033 .2144
	.300	-.0937	-.1243	.2054		.2379 .1448
	.520	-.1333	-.1569	.2906		.2243 .0366
	.685	-.2532	-.2846	-.1353		.1934 -.1326
	.775	-.2313	-.1754	.1717		.1277 .0557
	.900	-.0101	-.0721	-.0633		-.0524 -.0401
						-.1043 -.1036

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL
 MACH = .59500 Q = 591.74 P = 2387.9 RN/L = 4.8063

SECTION (1) VERTICAL
 Z/BY .1581 .3170 .4530 .6020 .6970 .8390 .9250

X/CY
 .000 .2865 .1330 .1368 .2237 .1493
 .025 .2+21 .1953 .3053 .3053 .2593
 .050 .2105 .1953 .2682 .2830 .2367
 .150 .2+76 .1563 .2044 .2012 .1436
 .203 .1+63 .1669 .1931 .1644 .0870
 E20 .2+66 .1+54 .2245 .2243 .13+3 .0298
 .635 .1+68 .1+53 .1246 .2573 .1806 .1458
 .775 .1+72 .1+53 .1216 .2917 .0959 .0354
 .923 .1+72 .1+53 .1213 .1022 .03872 .0577 .1383

ALPHA (3) = 3.912 BETA (2) = .3.897 MACH = .59500 Q = 591.74 P = 2387.9 RN/L = 4.8063

SECTION (1) VERTICAL
 Z/BY .1580 .3170 .4530 .6020 .6970 .8390 .9250

X/CY
 .000 .4331 .3722 .4333 .3917 .3175
 .025 .1+26 .1+26 .1980 .0934 .2370
 .050 .1+26 .1+26 .0076 .0351 .0045
 .150 .1+168 .0326 .0372 .0498 .0265
 .520 .1+2765 .0515 .0893 .0799 .0149
 .685 .1+2619 .0714 .1691 .1442 .-0.0108
 .775 .1+2205 .0735 .1235 .1927 .1340 .-1.997
 .920 .1+2355 .1532 .0724 .0396 .0312 .-0.2181
 .920 .1+2355 .1532 .1618 .1563 .-1183 .-2065

ALPHA (3) = 3.918 BETA (4) = .4.207 MACH = .59500 Q = 591.74 P = 2387.9 RN/L = 4.8063

SECTION (1) VERTICAL
 Z/BY .1590 .3170 .4530 .6020 .6970 .8390 .9250

X/CY
 .000 .2567 .0853 .1230 .0781 .0974
 .025 .1+546 .1+445 .1+200 .4275 .-7105
 .050 .1+3242 .1+5128 .1+3815 .3978 .-5740
 .150 .1+2358 .1+3695 .1+2969 .4316 .-4059
 .300 .1+2+35 .1+220+ .1+490 .0446 .0188
 .520 .1+32+4 .1+0147 .0599 .0951 .-0.0172
 .685 .1+26+3 .1+129 .0874 .0782 .1802
 .775 .1+2326 .0139 .0159 .0104 .0331 .-0.217
 .920 .1+2326 .0159 .0234 .1718 .1547 .-0.983 .-1304

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL							(XEV05)				
ALPHA (3) =	3.922	BETA (5) =	8.252	MACH =	.59500	O =	591.74	P =	2387.9	RN/L =	4.8063
SECTION (1) VERTICAL											
DEPENDENT VARIABLE CP											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV											
.000	-.1571	-.5714		-.4796		-.4211		-.3330			
.025	-.6631	-.1445		-.7349		-.4624		-.3312			
.050	-.6708	-.9294		-.7340		-.4614		-.3128			
.150	-.8293	-.0485		-.7166		-.4564		-.2885			
.300	-.3932	-.4164		-.6955		-.4689		-.2739			
.520	-.3942	-.1123		-.3660		-.3460		-.2600			
.685	-.2922	-.0644		-.1490		-.3281		-.2394			
.775	-.2705	-.0270		-.0379		-.0908		-.2826			
.903	-.1835	-.2463		-.1157		-.2450		-.2348			
								-.2270			
ALPHA (4) =	7.956	BETA (1) =	7.918	MACH =	.59428	O =	590.57	P =	2388.9	RN/L =	4.8012
SECTION (1) VERTICAL											
DEPENDENT VARIABLE CP											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV											
.000	-.1084	-.4754		-.4632		-.2582		-.2221			
.025	-.3747	.3391		.4040		.3751		.3032			
.050	-.3253	.2977		.3722		.3581		.2955			
.150	.1900	.1875		.2957		.2716		.1818			
.300	.0911	.1073		.2561		.2055		.1056			
.520	-.1337	.1841		.2644		.1996		.0062			
.685	-.2560	.2555		-.1296		.2524		.1695			
.775	-.2331	.1782		.1672		.1210		.0344			
.903	-.0015	-.0616		-.0565		-.0478		-.0517			
								-.1555			
ALPHA (4) =	7.955	BETA (2) =	-3.894	MACH =	.59428	O =	590.57	P =	2388.9	RN/L =	4.8012
SECTION (1) VERTICAL											
DEPENDENT VARIABLE CP											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV											
.000	.2519	.0801		.0821		.1528		.0818			
.025	.1992	.1672		.2793		.2709		.2328			
.050	.1693	.1528		.2498		.2551		.2086			
.150	.0664	.0651		.1849		.1753		.1170			
.300	-.0305	.0445		.1677		.1430		.0662			
.520	-.2023	.1162		.2175		.1624		.0058			
.685	-.2654	.2339		-.1263		.2144		.1529		-.1377	
.775	-.2177	.1266		.1150		.0729		.0695		.0126	
.903	-.0395	-.1110		-.1074		-.0967		-.0665		-.1328	

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TABULATED PRESSURE DATA - CA148 (AMES 11-073-1)

PAGE 657B

ALPHA (4) = 7.970		BETA (3) = .145		MACH = .59428	O = 590.57	P = 2388.9	RNL = 4.8012
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BW	.1530	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.022	.4091	.3395		.3844		.3412	.2584
.025	-.0767	-.2835		-.1824		-.1087	-.2207
.050	-.0121	-.0554		.0049		.0338	-.0082
.150	-.0562	-.0905		.0302		.0372	-.0131
.250	-.1348	-.0959		.0786		.0634	.0008
.520	-.2717	-.0605		.591		.1227	-.0147
.685	-.2494	.1840	-.1091	.1756	.1739	.1126	-.1924
.775	-.2008	.0775	.0635	.0225	.0189	.0370	-.2156
.903	-.0831	-.1625	-.1644	-.1593	-.1210	-.1742	
ALPHA (4) = 7.969	BETA (4) = 4.201	MACH = .59428	O = 590.57	P = 2388.9	RNL = 4.8012		
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BW	.1530	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.020	.2379	.0603		.0642		.1366	.1661
.028	-.3542	-.5639		-.344		-.4402	.6229
.050	-.3297	-.5591		-.3875		-.4095	-.5041
.150	-.2951	-.3469		-.3399		-.4743	-.38E7
.250	-.2223	-.2295		-.1352		-.0267	-.0256
.385	-.2144	-.1059		.0558		.0736	-.0516
.638	-.1259	-.1253	-.1270	.0501	.0538	.0919	-.2033
.775	-.1229	-.0397	.0326	-.0138	-.0499	.0420	-.1828
.903	-.1532	-.2214	-.1805	-.1929	-.1221	-.1996	
ALPHA (4) = 7.967	BETA (5) = 3.254	MACH = .59428	O = 590.57	P = 2388.9	RNL = 4.8012		
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BW	.1530	.3170	.4590	.6020	.6970	.8390	.9250
C							
.020	-.2332	-.6257		.5556		.4627	.4052
.028	-.7985	-.1193		-.7541		-.4690	-.3271
.050	-.327	-.6621		-.7445		-.4593	-.3049
.150	-.8831	-.10557		-.7570		-.4498	-.3025
.250	-.4544	-.1415		-.7269		-.4668	-.2830
.385	-.3323	-.1393		-.3566		-.3707	-.2973
.638	-.2737	-.0122	-.1524	-.1848	-.3872	-.3914	-.2571
.775	-.2733	-.0555	-.0390	-.0295	-.2933	-.2602	-.2560
.903	-.2281	-.2464	-.0958	-.2144	-.2786	-.2444	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL
ALPHA (5) = 12.002 BETA (1) = -7.881 MACH = .59502 Q = 591.86 P = 2388.2 RN/L = 4.8047

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	-1.3104	-54.37		-5519		-3416	-3113
.025	-3008	.3143		.3688		.3318	.2613
.050	.2512	.2767		.2890		.2498	.2474
.150	.1148	.1707		.2527		.1919	.1604
.200	.0243	.1100		.2460		.1738	.0843
.520	-.1421	.1927		.2304		.1382	.0067
.695	-.2374	.3117		.2336		.0991	.0217
.775	-.2345	.2995		.1681		.0636	.1738
.900	.0291	-.0630		-.0567		-.0536	-.1663

ALPHA (5) = 12.020 BETA (2) = -3.874 MACH = .59502 Q = 591.86 P = 2388.2 RN/L = 4.8047

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.2735	.0419		.0250		.0846	.0161
.625	-.1800	.1607		.2637		.2527	.2074
.050	.1693	.1762		.2360		.2283	.1813
.150	.0403	.0566		.1745		.1625	.0973
.700	-.3587	.0034		.1582		.1249	.0479
.620	-.2309	.1125		.2037		.1405	-.0050
.685	-.2533	.2519		.1162		.1898	.1309
.775	-.2055	.1506		.1215		.0491	.1491
.800	-.0147	-.1126		-.1147		-.1077	-.0029

ALPHA (5) = 12.028 BETA (3) = .150 MACH = .59502 Q = 591.86 P = 2388.2 RN/L = 4.8047

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X,CY							
.000	.3933	.3011		.3429		.2959	.2084
.025	-.0725	-.3065		-.1795		-.1133	-.2044
.050	.0017	-.0858		-.0057		.0314	-.0108
.150	-.0699	-.1028		.0198		.0169	-.0004
.520	-.1490	-.1076		.0690		.0454	-.0272
.620	-.2765	.0483		.1455		.1044	-.1850
.685	-.2533	.1345		-.1115		.1500	.1036
.775	-.2001	.0716		.0566		.0133	-.0392
.800	-.0379	-.1534		-.1743		-.1695	-.1675

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (5) = 12.028 BETA (4) = 4.211 MACH = .59502 0 = 591.86 P = 2388.2 RNL = 4.8047
 AMES 11-073(OA148) - 14OA/B/C/R ORB VERTICAL

SECTION 1: VERTICAL

Z/BV 1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

X/CY	.000	.2728	.0323	.0037	-.2003	-.2341
.025	-.3483	-.5534	-.4469	-.4593	-.5423	
.050	-.3299	-.5792	-.4007	-.4326	-.4598	
.075	-.2857	-.3331	-.3712	-.4763	-.3731	
.100	-.2570	-.2239	-.1156	-.0260	-.0632	
.125	-.2222	-.0201	-.0524	-.0568	-.0603	
.150	-.2256	-.1343	-.1214	-.0846	-.0442	
.175	-.2235	-.0153	-.0290	-.0258	-.0682	-.1892
.200	-.1415	-.2282	-.1878	-.1979	-.1363	-.1660

ALPHA (5) = 12.320 BETA (5) = 8.278 MACH = .59502 0 = 591.86 P = 2388.2 RNL = 4.8047

SECTION 1: VERTICAL

Z/BV 1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

X/CY	.2176	.3394	.6455	-.5429	-.4771
.2424	-.1541	-.1541	-.7588	-.4928	-.3336
.2672	-.0751	-.0751	-.7707	-.4582	-.3222
.2920	-.0133	-.0133	-.7893	-.4622	-.3181
.3168	-.00178	-.00178	-.7623	-.4967	-.3046
.3416	-.00569	-.00569	-.2580	-.382	-.3276
.3664	-.0202	-.0156	-.1507	-.4095	-.386
.3912	-.0644	-.0644	-.1190	-.2732	-.2738
.4160	-.1648	-.1648	-.1126	-.1981	-.2501
.4408	-.2545	-.2545	-.1126	-.2576	-.2576

AMES 11-073(OA148) - 14OA/B/C/R ORB VERTICAL

DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

S _{EF}	=	2690.0300 SQ.FT.	X _{HPP}	=	1076.6800 IN. X0
L _{REF}	=	.474.8000 IN.	Y _{HPP}	=	.0000 IN. Y0
B _{REF}	=	.936.0680 IN.	Z _{HPP}	=	.375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) = -4.026 JETAS (1) = -7.883 MACH = .59594

SECTION 11 VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4593 .6020 .6970 .8390 .9250

X/CV							
.920	.0307	-.2420	-.1914		-.0425	-.0407	
.325	.4983	.4524	.5342		.5087	.4534	
.660	.4446	.4029	.4813		.4736	.4105	
.150	.2918	.2731	.3745		.3602	.2741	
.200	.1561	.1666	.3277		.2796	.1790	
.520	-.1081	.1936	.3659		.2641	.0539	
.665	-.2635	.2931	.3780		.3256	.2292	
.775	-.2552	.1816	.1944		.1553	.0600	
.300	-.0140	-.0513	-.0442		-.0469	-.0575	

ALPHA (1) = -4.010 BETA (2) = -3.877 MACH = .59594

SECTION 11 VERTICAL DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4593 .6020 .6970 .8390 .9250

X/CV							
.900	.3768	.2509	.2792		.3772	.2932	
.125	.3304	.2631	.3655		.3629	.3190	
.365	.3073	.2553	.3295		.3402	.2944	
.150	.1771	.1459	.2536		.2517	.1919	
.390	.0527	.0623	.2341		.2107	.1197	
.620	-.1809	.1307	.3204		.2322	.0206	
.685	-.2716	.2495	-.1525		.2911	.2398	
.775	-.2130	.1354	.1499		.1196	.0253	
.900	-.0469	-.0730	-.0775		-.0823	-.0883	

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PARAMETRIC DATA

RUDDER	=	.000	SPDBRK	=	55.00
BUFLAP	=	.22.500	L-ELVN	=	.000
R-ELVN	=	.000	MACH	=	.600

(XEBV06)

(13 AUG 75)

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TABULATED PRE. QE DATA - 0414B (AMES 11-073-1)

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ALPHA (1) = -3.934 BETA (3) = .154 MACH = .59594 Q = .593.39 P = .2387.0 RN/L = 4.8396
 SECTION 1 : VERTICAL CP
 Z BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.5114 .4745 .5422 .5078 .4476
 -.0091 -.2693 -.2010 -.0339 -.2283
 .353 .1139 .0214 .0512 .0674 .0415
 .153 .0377 .0213 .0782 .0891 .0621
 .0647 -.1532 .1228 .1187 .0517
 .625 -.2572 .3626 .2624 .1876 .0178
 .695 -.2782 .2035 -.1580 .2478 .1785 .2254
 .775 -.2441 .3653 .0948 .0821 .0729 .2317
 .800 -.1335 -.1302 -.1234 -.1294 -.1021 -.2264

ALPHA (1) = -4.301 BETA (4) = 4.235 MACH = .59594 Q = .593.39 P = .2387.0 RN/L = 4.8396
 SECTION 1 : VERTICAL CP
 Z BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.2621 .2049 .2624 .1039 .1001
 -.2769 .1137 .4025 -.3553 .7980
 .1233 .1137 .1175 .3174 .6603
 .1537 .1137 .1175 .2449 .2232
 .1679 .1137 .1175 .0929 .0773
 .1318 .1137 .1175 .0667 .0311
 .1245 -.1548 .1241 .1427 .0752 .2771
 .1163 .1137 .1175 .0670 .0463 .2670
 .1168 .1137 .1175 .11821 .1121 -.2384

ALPHA (1) = -4.313 BETA (5) = 8.308 MACH = .59594 Q = .593.35 P = .2387.0 RN/L = 4.8396
 SECTION 1 : VERTICAL CP
 Z BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.0279 .0279 .2155 .3906 .2570
 .0279 .0279 .6315 .5979 .5200
 .0279 .0279 .6315 .5979 .4687
 .0279 .0279 .6315 .5979 .4185
 .0279 .0279 .6315 .5408 .3665
 .0279 .0279 .6315 .5335 .2917 .3421
 .0279 .0279 .6315 .5335 .2231 .3110
 .0279 .0279 .6315 .5335 .1712 .3156
 .0279 .0279 .6315 .5335 .1836 .2985

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TABLED PRESSURE DATA - OAI4B (AMES 11-073-1)

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AMES 11-073(OAI4B) -140A/B/C/R ORB VERTICAL

ALPHA (3) = 3.915 BETA (2) = -3.897 MACH = .59594 Q = 593.13 P = 2385.8 RNL = 4.8146

SECTION : INVERTICAL

Z/E/ .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .2795 .1272 .1347 .2207 .1416
.025 .2597 .1957 .3038 .3045 .2589
.050 .2130 .1730 .2680 .2813 .2340
.150 .0970 .0935 .1958 .1949 .1399
.300 -.0120 .0123 .1925 .1613 .0787
.520 -.2573 .0395 .2436 .1851 .0204
.625 -.2763 .2352 .1283 .2319 .1714 .1736
.775 -.2232 .1143 .1211 .0831 .0934 .0212 .1734
.925 -.0557 -.0557 -.1660 -.1006 -.0920 -.0778 -.1659

ALPHA (3) = 3.912 BETA (3) = .150 MACH = .59594 Q = 593.13 P = 2385.8 RNL = 4.8146

SECTION : INVERTICAL

Z/E/ .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .4356 .3736 .4312 .3698 .3182
.025 .0725 .3120 .1936 .0987 .2307
.550 .2294 .0555 .0159 .0255 .0044
.150 .0355 .1735 .0440 .0438 .0257
.720 -.1211 .1213 .0861 .0724 .0143
.620 -.2751 .3219 .1850 .1411 .0173
.675 -.2751 .1317 -.1239 .2256 .1361 .2104
.775 -.2269 .0512 .0621 .0349 .0332 .0272 .2249
.925 -.1003 -.1551 -.1578 -.1523 -.1177 -.2039

ALPHA (3) = 3.921 BETA (4) = .4204 MACH = .59594 Q = 593.13 P = 2385.8 RNL = 4.8146

SECTION : INVERTICAL

Z/E/ .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .2555 .0833 .1203 .0411 .0936
.025 .3573 .5534 .4331 .3705 .7035
.550 .3255 .5227 .3787 .3465 .5717
.150 .3004 .2692 .3230 .3674 .4225
.720 -.2633 -.2673 -.1682 -.1525 .0215
.620 -.3308 .1572 .1382 .0727 .0729 .0605
.450 -.2719 .1552 .1227 .1058 .2005
.775 -.2563 .1042 .0058 .0438 .0158 .2109
.925 -.1542 -.2026 .1730 .2035 .0319 .2201ORIGINAL PAGE IS
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*ABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

1XE8Y6S)

$\alpha_{OA} = 31^\circ = 3.925 \quad \beta_{TA} = 5^\circ = 8.248 \quad MACH = .59594 \quad Q = .593.13 \quad P = 2385.8 \quad RNL = 4.8146$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/CS	CCD	5771	.4857	.4227	.3496
-1.6615	-1.205	-7425	-4821	-3496	
-1.6726	-1.3379	-7455	-4693	-3290	
-1.6832	-1.0581	-7180	-4683	-2949	
-1.6941	-1.4173	-6965	-4775	-2863	
-1.7050	-1.1682	-3902	-3672	-2813	
-1.7159	-1.6322	-1515	-3342	-2544	
-1.7268	-1.3636	-3544	-3167	-2544	
-1.7376	-1.6836	-1000	-2739	-2536	
-1.7485	-1.2603	-14.5	-2553	-2522	

$\alpha_{OA} = 31^\circ = 3.927 \quad \beta_{TA} = 1^\circ = -7.908 \quad MACH = .59612 \quad Q = .593.49 \quad P = 2385.7 \quad RNL = 4.8178$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	TE90	3170	.4590	.6020	.6970	.8390	.9250
-1.6615	-1.448	-4712	-2571	-2332			
-1.6726	-1.336	-4231	-3746	-3017			
-1.6832	-1.056	-3703	-3606	-2846			
-1.6941	-1.416	-2973	-2747	-1807			
-1.7050	-1.167	-2617	-2120	-1031			
-1.7159	-1.633	-2633	-1663	-0122			
-1.7268	-1.367	-2935	-1593	-1517			
-1.7376	-1.686	-1569	-1211	-0330	-1440		
-1.7485	-1.263	-3749	-0600	-0513	-0529	-1464	

$\alpha_{OA} = 31^\circ = 3.928 \quad \beta_{TA} = 2^\circ = -3.891 \quad MACH = .59612 \quad Q = .593.49 \quad P = 2385.7 \quad RNL = 4.8178$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	TE90	3170	.4590	.6020	.6970	.8390	.9250
-1.6615	-1.441	0756	154	0782			
-1.6726	-1.339	-2738	-2676	-2273			
-1.6832	-1.054	-2453	-2462	-1977			
-1.6941	-1.416	-1826	-1749	-1115			
-1.7050	-1.166	-1675	-1379	-0518			
-1.7159	-1.636	-2157	-1575	-0086			
-1.7268	-1.368	-12+8	-25+0	-2035	-1504	-1669	
-1.7376	-1.685	-112	-0706	-0631	-0023	-1869	
-1.7485	-1.265	-1055	-11+3	-1071	-0845	-1705	

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TABULATED PRESSURE DATA - DATA B (AMES 11-073-1)

AMES 11-07310A14B) - 140A/B/C/R ORB VERTICAL

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SECTION 1 VERTICAL		DEPENDENT VARIABLE CP				(XEVN6)			
Z/BY	.1590	.3170	.4590	.6020	.6970	.8390	.9250		
X/CY									
.000	.4395	.3270		.3811		.3384		.2532	
.025	-.0763	-.3037		-.1731		-.1083		-.2094	
.050	.0150	-.0742		-.0102		-.0352		-.0179	
.150	-.0566	-.1042		.0224		.0326		.0053	
.300	-.1468	-.1109		.0718		.0525		-.0118	
.520	-.2920	.0273		.1587		.1156		-.0411	
.695	-.2629	-.1623		.2002		.1570		-.2111	
.775	-.2237	.0557		.0157		.0135		-.2234	
.800	-.0358	-.1563		-.1722		-.1685		-.2077	
ALPHA (+ 4) = 7.972	BETA (+ 3) = .143	MACH = .59612	Q = .593.49	P = .2385.7	R/NL = 4.8178				
Z/BY	.1590	.3170	.4590	.6020	.6970	.8390	.9250		
X/CY									
.000	.2357	.2544		.0718		.1071		.1652	
.025	-.3565	-.5693		-.4344		-.3856		-.6072	
.050	-.3334	-.5692		-.3307		-.3614		-.4937	
.150	-.2642	-.2337		-.3333		-.4265		-.3653	
.300	-.2655	-.2347		-.1465		-.0893		-.0348	
.520	-.3470	-.0529		.0581		.0785		-.0568	
.695	-.2486	-.2276		-.1229		.0514		.0964	
.775	-.2227	-.1524		-.0133		-.0107		-.0492	
.800	-.1524	-.2226		-.2226		-.0130		-.0439	
ALPHA (+ 4) = 7.659	BETA (+ 5) = .8.255	MACH = .59612	Q = .593.49	P = .2385.7	R/NL = 4.8178				
Z/BY	.1590	.3170	.4590	.6020	.6970	.8390	.9250		
X/CY									
.000	-.1971	-.6393		-.5436		-.4490		-.3973	
.025	-.7039	-.1.833		-.7389		-.4692		-.3176	
.050	-.7260	-.9712		-.7449		-.4615		-.3020	
.150	-.8+36	-.1.0*50		-.7377		-.4474		-.2947	
.300	-.4043	-.3823		-.7343		-.4567		-.2769	
.520	-.2865	-.1582		-.3401		-.3720		-.2877	
.695	-.2231	-.0323		-.1459		-.4027		-.3477	
.775	-.2231	-.2590		-.2590		-.2782		-.3208	
.800	-.2590	-.0375		-.2146		-.2152		-.2522	

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TABULATED PRESSURE DATA - DATA 1 AMES 11-073-1

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AMES 11-07310A14B - 140A/B/C/R ORB VERTICAL

α_{crit} = 12.038 β_{crit} (1) = -7.872 MACH = .47710 Q = 475.06 P = 1908.1 R_{FL} = 3.8553
 SECTION 1: EPIPOLAR

Z/BV .1530 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .1249 -.5693 -.5527 -.3640 .3365 .3205 .2472 .2441 .1579 .1809 .0917 .2455 .2135 -.1743 -.0101 .1547 -.1223 .1544 .1573 .0952 .0158 .1879 .1532 .1537 -.0631 -.0640 -.0731 -.1750

α_{crit} = 12.030 β_{crit} (2) = -3.872 MACH = .47710 Q = 475.06 P = 1908.1 R_{FL} = 3.8553
 SECTION 1: EPIPOLAR

Z/BV .1530 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .0161 .0052 .0052 .2250 .2276 .1543 .0987 .1204 .0325 .1356 .0222 .1802 .1878 .1878 .0510 .0298 .1878 .1755 .1139 .0953 .1661

α_{crit} = 12.036 β_{crit} (3) = .140 MACH = .47710 Q = 475.06 P = 1908.1 R_{FL} = 3.8553
 SECTION 1: EPIPOLAR

Z/BV .1530 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .2442 .2364 .1695 .1279 .2141 .0305 .0141 .0159 .0042 .0285 .0117 .0348 .0324 .0351 .0919 .2023 .0481 .2089 .1729 .1261 .2020

DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(10A14B) - 140A/B/C/I ORB VERTICAL (XEBV06)						
ALPHA (5) = 11.949	BETA (4) = 4.21:	MACH = .47710	Q = 475.06	P = 1908.1	RNL = 3.8563	
SECTION (1) VERTICAL DEPENDENT VARIABLE CP						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV						
.000	.2676	.0201	.0074	-.1701	-.2365	
.025	-.3568	-.5832	-.4515	-.4295	-.5501	
.050	-.3196	-.5830	-.4155	-.4002	-.4694	
.150	-.2850	-.3531	-.3851	-.5064	-.3402	
.300	-.2806	-.2406	-.1337	-.0375	-.0757	
.520	-.3500	-.0510	.0513	.0587	-.0895	
.685	-.2547	-.1271	-.1269	.0167	-.2283	
.775	-.2401	.0117	.0242	-.0360	-.0652	-.2172
.900	-.1518	-.2269	-.1970	-.2140	-.1456	-.2269
ALPHA (5) = 12.026	BETA (4) = 8.275	MACH = .47710	Q = 475.06	P = 1908.1	RNL = 3.8563	
SECTION (1) VERTICAL DEPENDENT VARIABLE CP						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV						
.000	-.2233	-.6796	-.6439	-.5389	-.4756	
.025	-.7696	-1.1581	-.7725	-.5080	-.3226	
.050	-.7909	-.9756	-.7756	-.4761	-.3074	
.150	-.5434	-1.0813	-.7756	-.4802	-.3045	
.300	-.4950	-.4297	-.7962	-.5073	-.3163	
.520	-.5038	-.1731	-.2871	-.3861	-.3293	
.685	-.3917	-.0280	-.1463	-.3988	-.3839	-.2737
.775	-.3548	-.1057	-.0872	-.2799	-.3619	-.2640
.900	-.2472	-.2712	-.1091	-.1968	-.2814	-.2582

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
 LREF = .474,.8000 IN. YMRP = .0000 IN. YO
 SREF = 936.0580 IN. ZMRP = 375.0000 IN. ZO
 SCALE = .0300

ALPHA (1) = -4.048 BETA (1) = -3.876 MACH = .89933

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.5033	.3632		.4040		.4877	.4299
.025	.3791	.2548		.3835		.4256	.3634
.050	.3575	.2519		.3564		.4064	.3486
.150	.2174	.1670		.3032		.3254	.2545
.300	.0804	.0787		.2973		.2889	.1870
.520	-.1254	.1234		.3904		.3175	.0912
.625	-.2512	.3447	-.1820	.4350	.3969	.2788	.3284
.775	-.2276	.2162	.2815	.2653	.2289	.0453	.3324
.900		.0961	.1082	.0633	.0306	-.1448	-.3418

ALPHA (1) = -4.048 BETA (2) = .153 MACH = .89933

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.020	.5745	.4742		.5680		.5680	.4778
.025	.0592	-.2397		-.1992		-.0403	-.1345
.151	-.1743	.0160		.0805		.1199	.0646
.150	.3676	-.0346		.1137		.1642	.1384
.313	-.2624	-.0725		.9337		.2049	.1236
.625	-.2292	.0433		.3493		.2746	.0810
.676	-.2371	.2395	-.1919	.3669	.3519	.2534	.3461
.776	-.2236	.1811	.2316	.2194	.1951	.0182	.3286
.900		.0374	.0618	.0449	-.0024	-.1675	-.3444

(XE8V071) (13 AUG 75)

PARAMETRIC DATA

RUDDER = .000 SPOILER = 55.000
 BDFLAP = 22.500 -ELVN = .000
 R-ELVN = .000 MACH = .900

ALPHA (1) = 3.5834

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL
 (XEBV07)

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.4862	.3481	.3481	.5956	.5956	.3009	.2258
	.025	-.1786	-.6712		-.5794		-.1970	-.1623
	.050	-.1061	-.6053		-.5169		-.1851	-.1482
	.150	-.1457	-.3172		-.2905		-.1961	-.1331
	.300	-.2394	-.3144		-.2664		-.2113	-.1616
	.520	-.3701	-.0489		.4153		-.1079	-.3115
	.665	-.3981	-.2299	-.2059	.4113		-.1137	-.3371
	.775	-.2225	.0941	.1810	.2230		-.2137	-.3565
	.900	-.0394		.0183	.0389		.0566	-.3845

ALPHA (2) = .010 BETA (1) = -3.903 MACH = .90060 Q = .90060 P = 1058.5 RNL = 3.5880

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.4423	.2829	.3144	.4114	.3543
	.025	.3016	.1988	.3532	.3962	.3337
	.050	.2892	.1917	.3301	.3734	.3166
	.150	.1499	.1051	.2766	.3016	.2258
	.300	.0298	.0370	.2738	.2643	.1571
	.520	-.1624	.1001	.3587	.2835	.0630
	.685	-.2607	.3298	-.1743	.3620	.2432
	.775	-.2319	.2069	.2556	.2350	.1999
	.900		.0936	.0864	.0617	.0044

ALPHA (2) = .014 BETA (2) = .148 MACH = .90060 Q = .90060 P = 1058.5 RNL = 3.5880

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.5271	.3921	.5079	.5089	.4031
	.025	-.0057	-.2894	-.2061	-.0590	-.1412
	.050	.1133	-.0542	.0437	.0782	.0549
	.150	.0078	-.1124	.0936	.1376	.1088
	.300	-.1330	-.1124	.1656	.1718	.0971
	.520	-.2523	.0297	.3132	.2412	.0539
	.685	-.2913	.2798	-.1726	.3161	.2232
	.775	-.2182	.1460	.2103	.1640	-.3243
	.900		.0257	.0456	.0232	-.0298

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

(XEBV07)

ALPHA (2) = .013 BETA (3) = 4.211 MACH = .90060 0 = 601.03 P = 1058.5 RN/L = 3.5880

SECTION : 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV -.000 -.4343 -.2793 -.2550 -.6411 -.2165 -.1369

.025 -.2583 -.7255 -.6483 -.6092 -.2142 -.1728

.050 -.1755 -.6183 -.5395 -.2058 -.1587

.150 -.1856 -.3610 -.3112 -.2132 -.1454

.200 -.2919 -.3762 -.2617 -.2232 -.1759

.520 -.4441 -.0362 -.3580 -.1809 -.3216

.695 -.3323 -.2214 -.1960 -.2122 -.3127

.775 -.2345 -.0875 -.1584 -.1835 -.2239 -.2273

.900 -.0233 .0007 .0082 .0324 -.1401 -.3569

ALPHA (3) = 3.998 BETA (1) = -3.905 MACH = .90070 0 = 600.82 P = 1058.0 RN/L = 3.5882

SECTION : 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV -.3917 -.2319 -.2300 -.3276 -.2736

.025 -.2451 -.1442 -.3352 -.3630 -.3058

.050 -.2394 -.1489 -.3023 -.3402 -.2845

.150 -.1156 -.0593 -.2526 -.2688 -.1889

.200 -.0115 .0034 -.2479 -.2271 -.1239

.520 -.0917 -.0917 -.2668 -.2454 -.0358

.695 -.2640 -.3308 -.1577 -.3183 -.2122 -.2674

.775 -.2290 -.2927 -.2464 -.2073 -.1664 -.0000 -.2844

.900 -.0688 .0776 .0333 -.0255 -.1728 -.2892

ALPHA (3) = 4.002 BETA (2) = .135 MACH = .90070 0 = 600.82 P = 1058.0 RN/L = 3.5882

SECTION : 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV -.4951 -.3504 -.4473 -.4485 -.3402

.025 -.0779 -.3274 -.0779 -.0635 -.1347

.050 -.0632 -.3953 -.0326 -.1025 -.0316

.150 -.0461 -.1214 -.0673 -.1155 -.0840

.200 -.1657 -.1335 -.1469 -.1483 -.0704

.520 -.2778 -.6225 -.2739 -.2098 -.0268

.695 -.2783 -.2824 -.1512 -.1819 -.2941

.775 -.2157 -.1256 -.1809 -.1322 -.0292 -.3027

.900 -.0225 .0180 -.0034 -.0531 -.1999 -.3203

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-07310A14B) - 140A/B/C/R ORB VERTICAL

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ALPHA (3) = 3.920 BETA (3) = 4.206 MACH = .90070 Q = 600.82 P = 1058.0 RNL = 3.5882

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3736 .2252 .1668 .1475 .0562

.025 -.2891 -.7499 -.5863 -.2213 -.1891

.050 -.2056 -.7157 -.5590 -.2192 -.1745

.150 -.2063 -.4437 -.5601 -.2456 -.1613

.200 -.3540 -.4132 -.3426 -.2454 -.1977

.520 -.4998 -.0245 -.2316 -.1373 -.3236

.685 -.2939 .2204 -.1750 .3273 .1756 -.1644

.775 -.2501 .CB42 .1303 .1513 .1649 -.1349

.900 -.C361 -.0229 -.0223 .0065 -.1451 -.3346

ALPHA (4) = 7.946 BETA (1) = -3.900 MACH = .89867 Q = 599.20 P = 1059.9 RNL = 3.5837

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3407 .1594 .1643 .2504 .1909

.025 .1508 .1089 .2902 .3325 .2752

.050 .1865 .1394 .2633 .3110 .2493

.150 .0403 .0299 .2249 .2430 .1616

.300 -.0628 -.0278 .2344 .2020 .0902

.520 -.2107 .0706 .3041 .2149 .0100

.685 -.2910 .3307 -.1654 .3504 .2838 .1716

.775 -.2224 .2076 .2358 .1870 .1402 -.0237

.900 .1004 .0726 .0150 -.0497 -.1977 -.2991

ALPHA (4) = 7.956 BETA (2) = .143 MACH = .89867 Q = 599.20 P = 1059.9 RNL = 3.5837

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4601 .2657 .3908 .3872 .2675

.025 -.1142 -.3434 -.1859 -.0630 -.1278

.050 .0356 -.1173 .0210 -.1224 .0217

.150 -.0768 -.1623 .0467 .0978 .0531

.500 -.1986 -.1697 .1629 .1178 .0359

.520 -.3153 .0322 .2500 .1672 -.0157

.685 -.2925 .2551 -.1704 .2309 .1394 -.2950

.775 -.2395 .1471 .1801 .0379 .0581 -.3192

.900 .0265 .0203 -.0275 -.0638 -.2349 -.3317

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL
 ALPHA (4) = 7.955 BETA (3) = 4.205 MACH = .89867 Q = 599.20 P = 1059.9 RN/L = 3.5837

SECTION 11 VERTICAL DEPENDENT VARIABLE CP
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

.000 .3287 .1621 .1114 .0682 -.0280
 .025 .2495 -.7604 -.5714 -.2433 -.2097
 .050 .2019 -.6955 -.5540 -.2390 -.1929
 .150 .1991 -.4507 -.5425 -.2421 -.1814
 .300 .3373 -.3968 -.3091 .2660 -.2299
 .520 .4905 -.0531 .1984 .1366 -.3472
 .685 .3209 .1874 -.1796 .2723 .2058 -.1608
 .775 .2669 .0552 .1152 .1191 .1475 -.1183
 .900 .0298 -.0369 -.0451 .0501 -.1416 -.3220

ALPHA (5) = 11.987 BETA (1) = -3.885 MACH = .89947 Q = 599.98 P = 1059.5 RN/L = 3.5879

SECTION 11 VERTICAL DEPENDENT VARIABLE CP
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

.000 .3554 .1387 .1020 .1643 .1056
 .025 .0033 -.0221 .2526 .2088 .2515
 .150 .0551 .0141 .2324 .2871 .2218
 .150 .1584 -.3473 .1986 .2219 .341
 .200 .1696 -.0774 .2131 .1788 .0666
 .520 .2745 .0481 .2562 .1866 .0169
 .525 .3325 .3252 -.2085 .314 .2541
 .775 .2563 .2180 .2287 .1734 .1208 .0454
 .800 .1092 .0668 .0001 .0639 -.2208 .2095

ALPHA (5) = 11.997 BETA (2) = 148 MACH = .89947 Q = 599.98 P = 1059.5 RN/L = 3.5879

SECTION 11 VERTICAL DEPENDENT VARIABLE CP
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

.000 .3911 .2315 .3473 .3450 .2349
 .025 .0408 .3450 .2328 .0675 -.1387
 .150 .0336 .1859 .0303 .1005 .0082
 .150 .0753 .2165 .0233 .0741 .0331
 .200 .2135 .2280 .1015 .1003 .0244
 .620 .3045 .2359 .2327 .1536 .0327
 .620 .2545 .2002 .2759 .2170 .1235
 .620 .2544 .1184 .1576 .1258 .0845 .0667
 .620 .0147 .03038 .0413 .0413 .0541 .2410

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 IXEN071
 AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL
 ALPHA (4) = 7.955 BETA (3) = 4.205 MACH = .89867 Q = 599.20 P = 1059.9 RN/L = 3.5837

DATE 14 FEB 76

TEABLATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -14DA/B/C/R ORB VERTICAL

ALPHA (5) = 11.287 BETA (3) = 4.223 MACH = .89947 Q = 599.98 P = 1059.5 RNL = 3.5879

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.300	.3537	.1436		.0407		-.0400
	.025	-.1171	-.6224		-.7476		-.3236
	.050	-.0310	-.5019		-.7340		-.2725
	.100	-.1366	-.3934		-.5576		-.3337
	.300	-.3229	-.4137		-.1410		-.2529
	.520	-.4973	-.1327		-.1352		-.3322
	.585	-.3846	-.1195		-.2211		-.2380
	.775	-.2797	-.0136		.2128		-.3251
	.900		-.0924		.0707		-.2945
					.0614		-.0926
					-.0812		-.3899
					-.0892		-.0436
							-.3197
							-.0398
							-.3327
							-.1373
							-.3228

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1XEBV071

DATE 14 FEB 75

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

XREF = 2690.0000 52.FT. XMPP = 1076.6800 IN. XO
 YREF = 474.8000 IN. YMPP = .0000 IN. YO
 ZREF = 936.0580 IN. ZMPP = 375.0000 IN. ZO
 SCALE = .0300

ALPHA (1) = -4.017 BETA (1) = -3.884 MACH = 1.3953 Q = 598.61 P = 439.24 RNL = 2.9168

SECTION (1) VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV
 .000 .7806 .6582 .6445 .7618 .7266
 .025 .6158 .5185 .4754 .8101 .7772
 .050 .6250 .5168 .4950 .7965 .7573
 .075 .5258 .4193 .6116 .7652 .7029
 .100 .3824 .3290 .7422 .7652 .6722
 .125 .2160 2.0319 .9221 .5478
 .150 -.3553 .3557 -.1773 .9494 .8803 .7555
 .175 -.1649 .8-E3 .8745 .8335 .76.2 .6396
 .200 .7207 .7185 .6770 .6235 .4224 -.4865

ALPHA (1) = -3.956 BETA (2) = .155 MACH = 1.3953 Q = 598.61 P = 439.24 RNL = 2.9168

SECTION (1) VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/C'
 .000 .8299 .7391 .7001 .8491 .7766
 .025 .2722 .1445 .0288 .4912 .4790
 .050 .4530 .3445 .0749 .5907 .5514
 .075 .4258 .2731 .2263 .6657 .6362
 .100 .2962 .2020 .6648 .7264 .6513
 .125 .1225 1.9172 .8100 .7608 .4838
 .150 -.3511 .7575 -.1726 .8742 .8245
 .175 -.2424 .7663 .8627 .8453 .7835 .6344
 .200 .6135 .6954 .6715 .6203 .4182 -.4653

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(XEBV08) (13 AUG 75)

PARAMETRIC DATA

RUDDER = .000 SPDBRK = 85.000
 EDFLAP = 22.500 L-ELVN = .000
 R-ELVN = .000 MACH = 1.400

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

ALPHA (1) = -4.012 BETA (3) = 4.241 MACH = 1.3953 Q = 598.61

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

.520 .0430 1.5199

.585 -.3919 .7105

.775 -.3277 .6618

.500 .5784 .6411

.000 -.007

.7185 .5859

.025 .5234 .4339

.050 .5448 .4411

.150 .4474 .2339

.300 .3041 .2532

.520 .1477 .1559

.685 -.3544 .9805

.775 -.2472 .7700

.925 .6721 .6758

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

SECTION 11 VERTICAL

(XEBV08)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

.520 .0430 1.5199

.585 -.3919 .7105

.775 -.3277 .6618

.500 .5784 .6411

.000 -.007

.7185 .5859

.025 .5234 .4339

.050 .5448 .4411

.150 .4474 .2339

.300 .3041 .2532

.520 .1477 .1559

.685 -.3544 .9805

.775 -.2472 .7700

.925 .6721 .6758

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

.520 .0430 1.5199

.585 -.3919 .7105

.775 -.3277 .6618

.500 .5784 .6411

.000 -.007

.7185 .5859

.025 .5234 .4339

.050 .5448 .4411

.150 .4474 .2339

.300 .3041 .2532

.520 .1477 .1559

.685 -.3544 .9805

.775 -.2472 .7700

.925 .6721 .6758

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

.520 .0430 1.5199

.585 -.3919 .7105

.775 -.3277 .6618

.500 .5784 .6411

.000 -.007

.7185 .5859

.025 .5234 .4339

.050 .5448 .4411

.150 .4474 .2339

.300 .3041 .2532

.520 .1477 .1559

.685 -.3544 .9805

.775 -.2472 .7700

.925 .6721 .6758

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

.520 .0430 1.5199

.585 -.3919 .7105

.775 -.3277 .6618

.500 .5784 .6411

.000 -.007

.7185 .5859

.025 .5234 .4339

.050 .5448 .4411

.150 .4474 .2339

.300 .3041 .2532

.520 .1477 .1559

.685 -.3544 .9805

.775 -.2472 .7700

.925 .6721 .6758

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

.520 .0430 1.5199

.585 -.3919 .7105

.775 -.3277 .6618

.500 .5784 .6411

.000 -.007

.7185 .5859

.025 .5234 .4339

.050 .5448 .4411

.150 .4474 .2339

.300 .3041 .2532

.520 .1477 .1559

.685 -.3544 .9805

.775 -.2472 .7700

.925 .6721 .6758

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

.520 .0430 1.5199

.585 -.3919 .7105

.775 -.3277 .6618

.500 .5784 .6411

.000 -.007

.7185 .5859

.025 .5234 .4339

.050 .5448 .4411

.150 .4474 .2339

.300 .3041 .2532

.520 .1477 .1559

.685 -.3544 .9805

.775 -.2472 .7700

.925 .6721 .6758

.000 -.001

.7551 .6655

.025 .2051 .3908

.050 .3892 .2910

.150 .3692 .2092

.300 .2207 .1432

.520 .0532 1.3171

.685 -.3354 .7146

.775 -.3183 .6943

.925 .5257 .5164

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7631 .5640

.025 .0910 -.0757

.050 .1113 -.0858

.150 .2154 -.0277

.300 .2048 .0833

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

$\Delta_{\text{PHI}} + \beta_1 = -.005$ $\text{BETA} (\beta_3) = 4.218$ MACH = 1.3961 0 = 598.93 P = 439.00 RN/L = 2.9179
 SECTION (1) INERTIAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .0005 .6875 .5906 .5327 .4451 .4056
 .025 .0332 -.1420 -.3932 .2280 .3819
 .050 .0453 -.1401 -.3927 .2354 .3929
 .100 .1353 -.0308 -.0728 .1789 .3584
 .150 .1465 .1433 .1858 -.0060 .1598
 .200 .15054 .11733 .16422 .6572 .1469
 .250 .14265 .6711 .7147 .6715 .6334 .2438
 .300 .14263 .5712 .6991 .6791 .6035 .3656
 .350 .1533 .5891 .5479 .5529 .4355 .4544

$\Delta_{\text{PHI}} + \beta_1 = 3.849$ $\text{BETA} (\beta_3) = -3.909$ MACH = 1.3959 0 = 599.13 P = 439.24 RN/L = 2.9206
 SECTION (1) INERTIAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .0005 .6205 .5272 .4938 .5640 .5559
 .025 .1706 .2623 .3042 .6433 .6434
 .050 .14189 .1673 .2035 .6368 .6254
 .100 .13430 .1267 .2830 .6265 .5789
 .150 .12528 .1693 .6282 .6473 .5643
 .200 .12685 .1265 .7550 .6767 .4191
 .250 .1265 .1856 .7958 .7400 .3361
 .300 .1265 .1762 .7251 .6688 .5500 .4070
 .350 .1265 .6193 .5224 .5771 .5265 .3616 .5251

$\Delta_{\text{PHI}} + \beta_1 = 3.957$ $\text{BETA} (\beta_3) = -154$ MACH = 1.3959 0 = 599.13 P = 439.24 RN/L = 2.9206
 SECTION (1) INERTIAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .0005 .6652 .5355 .5298 .6456 .6116
 .025 .1615 .1615 .0547 .3846 .3755
 .050 .12613 .12613 .1042 .4372 .4440
 .100 .1213 .1213 .1024 .5202 .5297
 .150 .12689 .12689 .4629 .6148 .5386
 .200 .1269 .1269 .6143 .6088 .3525
 .250 .12618 .12618 .1185 .6559 .5490 .2893
 .300 .12618 .12618 .1277 .6776 .5148 .3765
 .350 .12618 .12618 .6653 .5362 .3502 .5012

(XEBW08)

(XEBW08)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-07310A148) -140A/B/C/R ORB VERTICAL

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ALPHA (4) = 7.9+2 SETA (3) = 4.207 MACH = 1.3952 0 = 599.12 P = 439.71 RNL = 2.9175
 SECTION 1) VERTICAL
 Z/BV .1583 .3170 .4590 .6020 .6970 .8390 .9250

X/C₁
 .050 .55+5 .5030 .5030 .3799 .2925 .2608
 .025 .58+2 -.152+ .152+ -.374+ .0748 .2318
 .050 .1397 -.139+ .139+ -.3973 .0782 .2483
 .050 .2251 -.0134 -.0134 -.1686 -.0142 .2261
 .050 .0413 -.0625 -.0625 -.0259 -.0120 .0686
 .050 -.1119+ .5997 -.1119+ .4708 .5126 .1376
 .050 .6220 .15+ -.1680 .5582 .5551 .49+1 -.2929
 .050 .3238 .3901 .5428 .5821 .5902 .4713 .4087
 .050 .3339 .4613 .48+4 .48+4 .4568 .3419 -.5013

ALPHA (5) = 11.983 BETA (1) = -3.888 MACH = 1.3944 0 = 599.11 P = 440.18 RNL = 2.9183
 SECTION 1) VERTICAL
 Z/BV .1583 .3170 .4590 .6020 .6970 .8390 .9250

X/C₁
 .050 .5623 .4+67 .4+67 .3940 .3661 .3800
 .025 .2372 .2875 .2875 .1799 .4826 .5049
 .050 .4222 .2875 .2875 .1795 .4809 .4920
 .050 .2614 .1615 .1615 .1239 .4850 .4458
 .050 .2759 .1512 .1512 .1239 .5181 .1384
 .050 .0456 .6320 .6320 .6095 .5382 .2989
 .050 .1435 .7639 .1863 .6759 .5839 .4885 -.3177
 .050 .3510 .6318 .6753 .6203 .5558 .4307 -.4534
 .050 .5511 .5457 .4795 .4232 .2800 .5472

ALPHA (5) = 11.987 BETA (2) = .146 MACH = 1.3944 0 = 599.11 P = 440.18 RNL = 2.9183
 SECTION 1) VERTICAL
 Z/BV .1583 .3170 .4590 .6020 .6970 .8390 .9250

X/C₁
 .050 .67+5 .4745 .4745 .3679 .3330 .4713
 .025 .1616 -.0027 -.0027 -.1196 .1371 .2892
 .050 .3207 .1654 .1654 -.1298 .1417 .3504
 .050 .2759 .07+9 .07+9 -.0058 .4239 .3789
 .050 .0922 -.0038 -.0038 .2149 .4705 .4230
 .050 .1602 .14912 .14912 .4356 .4490 .2035
 .050 .6915 .15+1 .15+1 .5282 .3917 .2407
 .050 .3759 .14+3 .14+3 .5722 .5618 .4128 .4080
 .050 .32+2 .32+2 .4586 .4576 .4215 .3002 .5243

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DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL
SECTION 1 INVERTICALALPHA (5) = 11.893 BETA (3) = 4.224 MACH = 1.3944 Q = 599.11 P = 440.18 RN/L = 2.9183
Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

(XEPV08)

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

X/CY

.0222 .4636 .3046 .2030 .2062
.025 .1046 .1656 .3950 .0087 .1692
.050 .1572 .1487 .4143 .0034 .1812
.150 .2173 .0407 .2058 .1054 .1556
.300 .C391 -.0255 .1049 .0194 .0441
.520 -.1527 .4186 .3953 .4558 .1230
.695 -.4424 .4229 .4706 .4411 .2581
.775 -.3259 .3272 .4751 .4269 .4357
.925 .2737 .4036 .4130 .3817 .3166 .5255

ALPHA (6) = 15.905 BETA (1) = -3.863 MP,H = 1.3948

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BY

.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.7601 .5093 .3249 .3053 .3153
.025 -.1338 .1343 .1366 .4293 .4587
.050 .0205 .1254 .1385 .4276 .4441
.100 .2215 .1147 .0793 .4453 .4053
.200 -.0339 -.0220 .1672 .4771 .4020
.300 -.1361 .3545 .5665 .4972 .2624
.400 -.4558 .5565 -.2113 .5576 .4487
.600 .3003 .6695 .7045 .6056 .5247 .4014
.775 .5551 .5586 .4537 .3947 .2628 .5681

ALPHA (6) = 15.918 BETA (2) = -1.144

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BY

.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.5911 .4945 .3275 .2579 .4167
.025 .1227 .0355 .1547 .0300 .2613
.050 .3551 .1442 .1599 .0491 .2945
.100 .2738 .0543 .0307 .3652 .3038
.150 .0566 .0323 .1373 .4145 .3761
.300 -.1218 .2711 .3954 .3930 .1297
.520 -.4537 .5155 .4825 .4431 .2236
.600 -.3634 .4733 .5625 .5272 .4274
.775 .5551 .4274 .3933 .2737 .5374

ALPHA (6) = 15.918 BETA (2) = -1.144 MACH = 1.3948 Q = 599.11 P = 439.94 RN/L = 2.9186

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BY

.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.5911 .4945 .3275 .2579 .4167
.025 .1227 .0355 .1547 .0300 .2613
.050 .3551 .1442 .1599 .0491 .2945
.100 .2738 .0543 .0307 .3652 .3038
.150 .0566 .0323 .1373 .4145 .3761
.300 -.1218 .2711 .3954 .3930 .1297
.520 -.4537 .5155 .4825 .4431 .2236
.600 -.3634 .4733 .5625 .5272 .4274
.775 .5551 .4274 .3933 .2737 .5374

(XEPV08)

RN/L = 2.9186

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DATE 11- FEB 78

TEARDED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(DA148) -140A/B/C/R ORB VERTICAL

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1X8081

2.9186

RH/L = 2.9186

SECTION : VERTICAL

DEPENDENT VARIABLE CP

Z/R	1580	.3173	.4590	.5020	.6970	.8390	.9250
0.000	7601	5246					
0.010	1218	-1695					
0.020	-236	-1261					
0.030	2135	-1112					
0.040	3565	-1085					
0.050	5165	-1065					
0.060	6935	-1045					
0.070	8865	-1025					
0.080	10935	-1005					
0.090	13135	-985					
0.100	15455	-965					
0.110	18895	-945					
0.120	22455	-925					
0.130	26135	-905					
0.140	30035	-885					
0.150	34145	-865					
0.160	38465	-845					
0.170	43005	-825					
0.180	47755	-805					
0.190	52715	-785					
0.200	57875	-765					
0.210	63235	-745					
0.220	68785	-725					
0.230	74525	-705					
0.240	80455	-685					
0.250	86575	-665					
0.260	92885	-645					
0.270	99485	-625					
0.280	106375	-605					
0.290	113455	-585					
0.300	120725	-565					
0.310	128175	-545					
0.320	135715	-525					
0.330	143445	-505					
0.340	151365	-485					
0.350	159475	-465					
0.360	167785	-445					
0.370	176395	-425					
0.380	185295	-405					
0.390	194395	-385					
0.400	203695	-365					
0.410	213295	-345					
0.420	223195	-325					
0.430	233395	-305					
0.440	243895	-285					
0.450	254695	-265					
0.460	265795	-245					
0.470	277195	-225					
0.480	288895	-205					
0.490	300995	-185					
0.500	313495	-165					
0.510	326395	-145					
0.520	340695	-125					
0.530	355395	-105					
0.540	370495	-85					
0.550	385995	-65					
0.560	401895	-45					
0.570	418195	-25					
0.580	434895						

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

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(13 AUG 75)

REFERENCE DATA

SREF	2630.0000 SQ.FT.	XMRP	1076.5800 IN. XC	RUDDER = .000	SPDRK = 85.000
LREF	.474.8000 IN.	YMRP	.00000 IN. YO	BDFLAP = 22.500	L-ELVN = .000
BREF	.936.0580 IN.	ZMRP	.375.0000 IN. ZO	R-ELVN = .000	MACH = 1.250
SCALE	.0300				
ALPHA (1)	= -4.026	BETA (1)	= -3.882	MACH = 1.2460	P = 551.80 RNL = 3.0276
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP	
Z/BV	.1580	.3170	.4590	.6020	.6970 .3390 .9250
X/CV					
.000	.7625	.6257	.6479	.7359	.6892
.025	.5942	.4570	.5957	.7591	.7125
.050	.5955	.4578	.6059	.7438	.6946
.150	.4802	.3506	.6303	.7056	.6350
.300	.3249	.2806	.7083	.6987	.5982
.520	.1591	.1236	.8704	.7440	.4639
.685	-.3697	-.9027	-.1915	.8952	.6907
.775	-.0546	.7893	.8086	.7676	-.3576
.900	.6397	.6370	.5954	.5377	.5498
					-.5070
					-.6046
ALPHA (1)	= -4.017	BETA (2)	= .155	MACH = 1.2460	P = 551.80 RNL = 3.0276
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP	
Z/BV	.1580	.3170	.4590	.6020	.6970 .3390 .9250
X/CV					
.000	.8141	.6899	.6677	.8189	.7353
.025	.2778	.0831	.0142	.4383	.4041
.050	.4362	.2943	.0348	.5239	.4678
.150	.3755	.2112	.4955	.6040	.5671
.200	.2174	.1426	.6374	.6589	.5757
.520	.0572	.1288	.7977	.7123	.4094
.685	-.4448	.7739	-.1876	.8387	.6723
.775	-.1443	.7370	.8040	.7727	-.3354
.900	.5941	.5941	.6179	.5669	.5510
					-.4904
					-.5766

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL.

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$\text{ALFA} (1) = -4.025 \quad \text{BETA} (1) = 4.236 \quad \text{MACH} = 1.2460 \quad 0 = 599.62 \quad P = 551.80 \quad RN/L = 3.0283$

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY	.000	.7468	.6164	.6049	.5594	.5067	
	.025	.0684	-.1685	-.3132	.3257	.3911	
	.050	.0987	-.1604	-.3008	.3274	.3987	
	.150	.1985	-.0052	-.0854	.3312	.3971	
	.300	.1382	.0205	.3567	.2899	.3334	
	.520	.0293	.1122	.8170	.3340	.0846	
	.685	-.4958	.6062	-.1954	.7645	.2592	-.2983
	.775	-.1997	.6338	.6984	.7251	.3498	-.5133
	.900		.5121	.5642	.5608	.5527	.5959

$\text{ALPHA} (2) = .013 \quad \text{BETA} (1) = -3.903 \quad \text{MACH} = 1.2463 \quad 0 = 599.67 \quad P = 551.57 \quad RN/L = 3.0283$

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CY	.000	.6256	.5511	.5343	.6488	.6068		
	.025	.5136	.3949	.4091	.6926	.6506		
	.050	.5243	.3879	.4389	.6798	.6334		
	.150	.4116	.2857	.5259	.6452	.5781		
	.300	.2562	.1978	.6321	.6418	.5434		
	.520	.0860	.1250	.8045	.6826	.4146		
	.685	-.4546	.8477	-.1787	.7625	.6334	-.3672	
	.775	-.1515	.7420	.7575	.7110	.6559	-.5342	
	.900		.6070	.5932	.5496	.4918	.2821	-.6144

$\text{ALPHA} (2) = .017 \quad \text{BETA} (2) = .152 \quad \text{MACH} = 1.2463 \quad 0 = 599.67 \quad P = 551.57 \quad RN/L = 3.0283$

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CY	.000	.7559	.6178	.5782	.7380	.6484		
	.025	.2056	.0172	-.0946	.3840	.3597		
	.050	.3758	.2295	-.0495	.4980	.4320		
	.150	.3194	.1437	.3189	.5484	.5124		
	.300	.1568	.0798	.5613	.6049	.5256		
	.520	-.0057	.1184	.7075	.6474	.3528		
	.685	-.5048	.6592	-.1751	.7149	.3333		
	.775	-.2242	.6651	.7522	.6612	.5038	-.5078	
	.900		.5387	.5762	.5424	.4895	.2786	-.5863

(XEBV09)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

ALPHA (2) = .013 BETA (3) = 4.217 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0283

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6772 .5486 .4999 .4646 .4127

.025 -.0278 -.2078 -.3536 .2587 .3365

.050 .0095 -.2093 -.3667 .2633 .3478

.150 .1338 -.0762 -.1849 .2709 .3476

.300 .0655 -.0234 -.3122 .1834 .2824

.520 -.0832 .1025 .6444 .3300 .1265

.685 -.5339 .6120 .7451 .7210 .3829

.775 -.3060 .5784 .6462 .6520 .4835

.900 .4771 .5274 .4927 .4946 .4551

ALPHA (3) = 3.907 BETA (1) = -3.907 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0276

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6267 .4913 .4436 .5523 .5226

.025 -.2849 -.2925 -.2500 -.6134 .5874

.050 .4179 .3115 .2574 .6031 .5676

.150 .3226 .2152 .3523 .5805 .5168

.300 .1875 .1276 .5530 .5805 .4683

.520 .0264 .1136 .7306 .6198 .3517

.685 -.5284 .7780 -.1924 .7535 .5696

.775 -.2174 .6765 .7006 .6522 .4630

.900 .5617 .5426 .4992 .4410 .2505

ALPHA (3) = 3.907 BETA (2) = .148 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0276

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7104 .5561 .4974 .6519 .5715

.025 .1674 -.0154 -.1386 .3268 .3177

.050 .3261 .1842 -.1064 .4440 .3953

.150 .2742 .0917 .0392 .4946 .4640

.300 .1038 .0151 .4860 .5478 .4760

.520 -.0583 .1053 -.1925 .6173 .5738

.685 .5322 .6035 .6853 .6375 .5350

.775 -.2786 .6014 .6848 .6681 .6111

.900 .4934 .5240 .4972 .4483 .2450

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

ALPHA (3) = 3.911 BETA (3) = 4.207 MACH = 1.2463 0 = 599.67 P = 551.57 RNL = 3.0276
 AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL
 (XEBV09)

SECTION 1 INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.200	.6105	.4933	.4093	.3787	.3211
.025	-.0595	-.2459	-.4316	.2047	.2861	
.050	.0190	-.2276	-.4149	.2073	.2993	
.150	.1089	-.1093	-.2917	.2008	.2905	
.300	.0357	-.0688	.0079	.0079	.2164	
.620	-.1556	.0915	.5738	.4377	-.1286	
.665	-.4694	.5355	-.1889	.6666	.4454	-.4180
.775	-.3549	.4933	.6024	.5919	.5049	-.5908
.800	.4115	.4814	.4224	.4348	.3753	-.6140

ALPHA (4) = 7.933 BETA (1) = 3.903 MACH = 1.2463 0 = 599.67 P = 551.57 RNL = 3.0282
 DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.200	.6429	.5155	.3677	.4484	.4290
.025	.3295	.2369	.1770	.5379	.5212	
.050	.3784	.2543	.1801	.5282	.5040	
.150	.2661	.1556	.2367	.5117	.4554	
.200	.1631	.0535	.4995	.5239	.4319	
.620	-.0225	.0834	.6537	.5501	.2815	
.665	-.5325	.5354	.2023	.6170	.5050	-.3704
.775	-.3211	.6371	.6502	.5415	.4118	-.5493
.800	.5209	.5259	.5000	.3930	.2156	-.6056

ALPHA (4) = 7.933 BETA (2) = .143 MACH = 1.2463 0 = 599.67 P = 551.57 RNL = 3.0282
 DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.200	.6877	.4955	.4091	.5559	.4759
.025	.1785	-.1613	-.1672	.2895	.2754	
.050	.3187	.1427	-.1471	.3908	.3374	
.150	.2370	.0431	-.0191	.4348	.4079	
.200	.0447	.0321	.3961	.4802	.4162	
.620	-.1174	.0596	.5232	.4945	.2200	
.665	-.5660	.6152	-.1971	.5910	.4461	-.3342
.775	-.3636	.6250	.6219	.6022	.3873	-.4441
.800	.5137	.5137	.4785	.4448	.3982	-.508E

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REGULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

ALPHA (4) = 7.857 BETA (3) = 4.208 MACH = 1.2463 Q = 599.67 P = 551.57 RNL = 3.0282

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6338	.4614	.3362	.2667	.2153
.025	.0741	-.2479	-.4631	.0939	.2033
.050	.1206	-.2202	-.4965	.0991	.2160
.150	.1623	-.0936	-.2788	.0660	.2044
.300	-.0292	-.1251	-.0972	-.0546	.0123
.520	-.1966	.0495	.4983	.4737	.0710
.685	-.4914	.5027	-.2004	.5609	.4464
.775	-.3970	.4056	.5484	.5403	.4029
.933		.3464	.4277	.4054	.3861

ALPHA (5) = 11.893 BETA (1) = -3.885 MACH = 1.2447 Q = 599.41 P = 552.74 RNL = 3.0279

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

DEPENDENT VARIABLE CP

.000	.6616	.4257	.3060	.3544	.3471
.025	.2830	.184	.1249	.4732	.4651
.050	.2150	.2680	.1258	.4701	.4484
.150	.2110	.1053	.1521	.4577	.3986
.220	.0345	.0114	.4561	.4697	.3789
.520	-.0834	.0479	.5919	.4923	.2250
.685	-.5259	.5359	.1938	.5517	.4422
.775	-.3327	.6229	.6216	.4911	.3635
.933		.5253	.4760	.4057	.3499

ALPHA (5) = 11.849 BETA (2) = .145 MACH = 1.2447 Q = 599.41 P = 552.74 RNL = 3.0278

SECTION 11 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

DEPENDENT VARIABLE CP

.000	.6587	.4448	.3412	.4782	.4251
.025	.1564	-.0524	-.1919	.2425	.2374
.050	.2037	-.1189	-.1760	.3431	.2900
.150	.2223	-.0068	-.0563	.3731	.3605
.300	.0174	-.0790	.3187	.4422	.3634
.520	-.1495	.0395	.4546	.4286	.1668
.685	-.5567	.5215	-.1985	.5275	.3583
.775	-.2609	.4617	.5748	.5561	.3503
.933		.3334	.4284	.4036	.3545

ALPHA (5) = 11.849 BETA (2) = .145 MACH = 1.2447 Q = 599.41 P = 552.74 RNL = 3.0278

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 1404/B/C/R ORB VERTICAL

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REFERENCE DATA

SREF =	2690.0000	50 FT.	XMRP =	1076.6800	IN. X0
LREF =	.78000	IN.	YMRP =	.00000	IN. Y0
BREF =	936.0680	IN.	ZMRP =	.375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -4.037 BETA (1) = -3.883 MACH = 1.0977 0 = 598.52 P = 709.53

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.6876	.5510	.5913	.6790	.6204
	.5302	.5379	.5918	.6623	.6021
C50	.5190	.3643	.5944	.6494	.5865
	.3914	.3055	.5765	.6047	.5253
-150	.2374	.2673	.6221	.5939	.4840
-300	.0344	.6357	.7859	.6489	.3316
-695	-.4997	.8389	-.2320	.5860	-.4540
-775	-.0412	.6873	.7146	.5987	.4267
-900	.5271	.5265	.4768	.4151	.1749

ALPHA (1) = -4.035 BETA (2) = 155 MACH = 1.0977 0 = 598.52 P = 709.53

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.7471	.6221	.7481	.7496	.6587		
	.2532	-.0197	.1396	.3333	.2789		
C50	.3547	.2011	.3660	.4219	.3664		
	.3811	.1236	.4453	.5055	.4575		
-150	.1215	-.1153	.5664	.5568	.4626		
-300	-.0119	.5660	.7343	.6158	.2864		
-520	-.3632	.8235	-.2282	.7687	.5777	-.4405	
-695	-.0631	.6655	.7087	.6696	.4085	-.5335	
-775	.4911	.5048	-.4670	.4085	.1746	-.5815	
-900							

(XEBV10) (13 AUG 75)

PARAMETRIC DATA

RUNDER =	.000	SPDBRK =	85.000
BDFLAP =	.22.500	L-ELVN =	.000
R-ELVN =	.000	MACH =	1.100

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) - 140A/B/C/R ORB VERTICAL

ALPHA (1) = -4.042 BETA (3) = 4.235 MACH = 1.0977 Q = 598.52 P = 709.53 RNL = 3.1944

SECTION 1: INVERTICAL

Z/BV .1560 .3170 .4590 .5020 .6970 .8390 .9250

X/CY	.000	.6711	.5412	.5286	.5119	.4539
C25	.0196	-.3354	-.2687	.2451	.2961	
.050	.0423	-.2495	-.2410	.2484	.3040	
.150	.1274	-.0581	-.1629	.2465	.3028	
.450	.0202	-.0720	.3341	.2183	.2220	
.500	-.1150	.0568	.6949	.6602	.2470	-.2356
.650	-.5123	.6094	.7468	.1407	.4697	
.750	-.1391	.5624	.6160	.6335	.2252	-.5965
1.000		.4232	.4537	.4524	.4488	.6422

ALPHA (2) = .320 BETA (1) = -3.899 MACH = 1.0996 Q = 598.85 P = 707.64 RNL = 3.1885

SECTION 1: INVERTICAL

Z/BV	.1560	.3170	.4590	.5020	.6970	.8390	.9250
X/CY	.6429	.4556	.5131	.6029	.5559		
.250	.4546	.2369	.4773	.6184	.5595		
.350	.1523	.2369	.4757	.6027	.446		
.450	.1765	.1205	.5057	.5622	.1849		
.500	.1565	.1269	.5784	.5536	.4478		
.650	.0295	.0894	.7379	.5989	.2983		
.750	.1785	.0804	.7595	.5405	.4518		
1.000	.0376	.0748	.6220	.5596	.3925	-.5464	
			.4917	.4444	.3803	.1483	-.5965

ALPHA (2) = .325 BETA (2) = .152 MACH = 1.0996 Q = 598.85 P = 707.64 RNL = 3.1885

SECTION 1: INVERTICAL

Z/BV	.1560	.3170	.4590	.5020	.6970	.8390	.9250
X/CY	.6596	.5516	.6421	.6865	.5875		
.250	.5579	.1516	.0457	.2961	.2521		
.350	.1801	.1601	.2704	.4115	.3340		
.450	.1844	.1384	.3870	.4623	.4168		
.500	.1935	.1364	.5181	.5162	.4249		
.650	.0361	.0816	.6783	.5677	.2423		
.750	.1841	.1841	.7151	.6538	.5224	-.4106	
1.000	.5723	.6323	.5653	.3902	.5003	-.5391	
		.4754	.4351	.3734	.1434		

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-07310A14B) -140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6279 .4761 .4594 .4284 .4327 .3563

.023 -.0552 -.3614 -.4284 -.4284 -.2444

.023 -.0347 -.3170 -.4128 -.4128 -.2557

.050 -.0845 -.1310 -.2098 -.2098 -.1902

.150 -.0269 -.1341 -.3573 -.3573 -.2537

.150 -.1928 -.2395 -.6168 -.6168 -.1760

.522 -.5275 -.5387 -.2055 -.6804 -.2416

.555 -.5275 -.5387 -.2055 -.6804 -.2416

.775 -.2157 -.5219 -.5921 -.5819 -.1739

.900 -.5328 -.4397 -.4045 -.5639 -.4976

.900 -.5328 -.4397 -.4045 -.38868 -.5753

.900 -.5328 -.4397 -.4045 -.38868 -.6099

ALPHA (3) = 3.934 BETA (1) = -3.903 MACH = 1.0985

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6262 -.331 .4170 .5177 .4758

.3475 .2135 .3183 .5657 .5105

.3553 .2255 .3481 .5509 .4961

.153 .2552 .1325 .4182 .5110 .4392

.450 .1022 .0422 .5156 .5053 .4012

.520 -.0562 .5196 .6826 .4913 .2523

.695 -.6268 .7716 -.1918 .7052 .6270

.775 -.1930 .6206 .6314 .5747 .5168

.900 .4779 .4550 .4030 .3448 .3574

.900 .4779 .4550 .4030 .3448 .1172

.900 .4779 .4550 .4030 .3448 .6155

ALPHA (3) = 3.940 BETA (2) = .149 MACH = 1.0985

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6744 .4981 .4463 .6090 .5084

.000 .1405 -.1142 -.1995 .2500 .2099

.025 .2921 .0267 -.1492 .3894 .2960

.050 .1972 .0058 -.3165 .4117 .3661

.300 -.0144 -.0617 -.4619 .4621 .3754

.520 -.1426 .3720 .5939 .5071 .1902

.695 -.6475 .6661 -.1911 .4669 .4126

.775 -.2212 .5733 .6387 .5815 .3484

.900 .3287 .4434 .3901 .3287 .1017

.900 .3287 .4434 .3901 .3287 .1017

.900 .3287 .4434 .3901 .3287 .1017

.900 .3287 .4434 .3901 .3287 .1017

.900 .3287 .4434 .3901 .3287 .1017

.900 .3287 .4434 .3901 .3287 .1017

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IXEBV101

RNL = 3.1685

RNL = 3.1684

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

(XEBV10)

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ALPHA (3) = 3.944 BETA (3) = 4.204 MACH = 1.0985 0 = 598.62 P = 708.59 RN/L = 3.1905

SECTION 1 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV	.333	.5879	.4277	.3694	.3452	.2782
.025		.1129	.3786	.5176	.1332	.1978
.050		.0506	.3435	.5154	.1365	.2102
.150		.0370	.1622	.2651	.1420	.2086
.175		.0661	.1772	.3328	.0739	.1306
.180		.2652	.1726	.5378	.2656	.2886
.185		.6915	.1958	.6084	.5910	.5059
.190		.2374	.5016	.5557	.5040	.5498
.195		.2347	.4675	.2452	.3321	.5760
A-240	= 2.652	BETA (1) = -3.899	MACH = 1.0980	0 = 598.61	P = 709.30	RN/L = 3.1901

SECTION 2 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV	.6164	.3762	.3096	.4037	.3655	
.025		.2232	.1332	.5168	.4735	
.050		.2232	.2470	.5077	.4550	
.150		.0683	.1678	.4689	.3926	
.175		.0683	.4522	.4606	.3554	
.180		.0651	.6297	.4856	.1877	
.185		.0651	.1226	.5670	.4290	
.190		.0651	.6939	.4580	.4826	
.195		.0651	.4328	.3227	.5783	
A-240	= 2.652	BETA (2) = -1.144	MACH = 1.0980	0 = 598.61	P = 709.30	RN/L = 3.1901

X/CV	.6164	.3762	.3096	.4037	.3655	
.025		.2232	.1332	.5168	.4735	
.050		.2232	.2470	.5077	.4550	
.150		.0683	.1678	.4689	.3926	
.175		.0683	.4522	.4606	.3554	
.180		.0651	.6297	.4856	.1877	
.185		.0651	.1226	.5670	.4290	
.190		.0651	.6939	.4580	.4826	
.195		.0651	.4328	.3227	.5783	
A-240	= 2.652	BETA (2) = -1.144	MACH = 1.0980	0 = 598.61	P = 709.30	RN/L = 3.1901

DEPENDENT VARIABLE CP

SECTION 3 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

SECTION 4 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

$\alpha_{crit} (\beta_4) = 7.298$ $BETA (3) = 4.206$ MACH = 1.0980 Q = 598.61 P = 709.30 RN/L = 3.1901
 SECTION 11: VERTICAL

DEPENDENT VARIABLE CP

X/CY	Z/BY	BETA (1) = .4590	MACH = .6970	P = .8390	RN/L = .9250
.000	.5953	.3716	.2658	.2355	.1785
.025	.0461	.3863	.5490	.0667	.1453
.050	.0110	.3339	.5289	.0694	.1596
.075	.0525	.2050	.3917	.0717	.1498
.100	.1312	.2351	.2319	.0676	.0668
.125	.2153	.1452	.4739	.3386	.2796
.150	.5323	.5330	.5280	.3536	.4976
.175	.3543	.4233	.5248	.4507	.3556
.200	.3373	.3630	.304	.2806	.1869

$\alpha_{crit} (5) = 11.921$ $BETA (1) = -3.873$ MACH = 1.0991 Q = 599.16 P = 708.60 RN/L = 3.1919

SECTION 11: VERTICAL

DEPENDENT VARIABLE CP

X/CY	Z/BY	BETA (1) = .4590	MACH = .6970	P = .8390	RN/L = .9250
.000	.6415	.3609	.2301	.3097	.2791
.025	.2015	.0543	.0826	.4716	.4325
.050	.2652	.1227	.1329	.4575	.4153
.075	.1448	.3177	.3488	.4315	.3551
.100	.3443	.0583	.4355	.4214	.3155
.125	.1492	.2957	.5505	.4358	.1299
.150	.6635	.7552	.1978	.5151	.3813
.175	.6976	.5945	.4995	.4317	.4830
.200	.2958	.4254	.3379	.2705	.0653

$\alpha_{crit} (5) = 11.930$ $BETA (2) = -1.16$ MACH = 1.0991 Q = 599.16 P = 708.60 RN/L = 3.1919

SECTION 11: VERTICAL

DEPENDENT VARIABLE CP

X/CY	Z/BY	BETA (1) = .4590	MACH = .6970	P = .8390	RN/L = .9250
.000	-6.221	.3911	.2868	.4644	.3910
.025	.1652	.1659	.3224	.1737	.1431
.050	.2376	.0126	.2672	.2954	.2177
.075	.1326	.0977	.0922	.3288	.2874
.100	.2786	.1193	.3695	.3723	.2675
.125	.2507	.1649	.4432	.3823	.0865
.150	.6400	.5562	.4955	.3382	.4373
.175	.3512	.4315	.5733	.2519	.5307
.200	.2963	.2856	.2300	.2665	.3665

(XE6V10)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SECT	=	2550.0000 SQ.FT.	XMP	=	1076.6800 IN. X0
LEF	=	.474-.8003 IN.	YIP	=	.0000 IN. Y0
REF	=	.935-.0586 IN.	ZMP	=	.375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) = -4.067 BETA (1) = -3.873 MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

2/34	.1593	.3170	.4590	.6020	.6970	.8390	.9250
A/CV							
.020	.5297	.3941		.4753	.5467	.4799	
.025	.3975	.3191		.5228	.5292	.4520	
.050	.3821	.3139		.4992	.5105	.4388	
.150	.2529	.2329		.4550	.4567	.3683	
.300	.1468	.1663		.4945	.4392	.3211	
.500	.0358	.5300		.6522	.4999	.1461	
.700	.1720	.7222		.6718	.5972	.4289	
.775	.2775	.5555		.5702	.4373	.2499	
.900	.3705	.3493		.2957	.2332	.0216	
ALPHA (1) = -4.047 BETA (1) = -1.48 MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778							
SECTION 11 VERTICAL							
2/34	.1593	.3170	.4590	.6020	.6970	.8390	.9250
A/CV							
.020	.5920	.5254		.6551	.6187	.5172	
.025	.4921	.1579		.0299	.1607	.0874	
.050	.2257	.0355		.2504	.2993	.2310	
.100	.1182	.0531		.3109	.3393	.2865	
.200	.0689	.0557		.4204	.3896	.2805	
.400	.1634	.1453		.5938	.4604	.1156	
.600	.1542	.8927		.2268	.4250	.3430	
.700	.33635	.5153		.5544	.4341	.2546	
.900	.3229	.3202		.2706	.2089	.0065	

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TEXAS 11-073(OA14B) 15 AUG 75

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-07310A1481 - 1140A/B/C/R ORB VERTICAL

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$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

$\alpha_{crit} (\beta_1) = -.4 .557$ $\beta_{eta} (\beta_1) = 4.239$ MACH = .90043 0 = 600.11 P = 1057.3 RNL = 3.5778
 SECTION 1: VERTICAL

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TABULATED PRESSURE DATA - OAI148 (AMES 11-073-1)

AMES 11-073(OAI148) -140A/B/C/R ORB VERTICAL

ALPHA (2) = .024 BETA (3) = 4.220 MACH = .89947 0 = 599.38 P = 1058.3 RNL = 3.5741

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.4355	.2949	.3119	.2531	1814
	.025	-.2658	-.6963	-.3585	-.0329	.0148
	.050	-.1763	-.6273	-.3469	-.0327	.0275
	.150	-.1644	-.3378	-.3058	-.0527	.0148
	.300	-.2552	-.1738	.0700	.0324	-.0678
	.520	-.2978	-.3169	.4944	.1677	-.2061
	.685	-.2376	.4951	-.2340	.5732	.3522
	.775	-.2836	.497	-.4248	.4308	.3737
	.900		.2411	.2388	.2233	.2154

ALPHA (3) = 3.936 BETA (1) = -3.911 MACH = .89917 0 = 599.47 P = 1059.2 RNL = 3.5758

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.3869	.2431	.3164	.3953	3370
	.025	.2547	.1983	.4615	.4511	.3794
	.050	-.2485	.1992	.4327	.4334	.3593
	.150	.1353	.1644	.4056	.3834	.2875
	.300	.0422	.1230	.4303	.3600	.2392
	.520	-.1038	.4799	.5609	.3932	.0608
	.685	-.2082	.6793	-.1908	.4892	.3273
	.775	-.2940	.5273	.5014	.4218	.3496
	.900		.3560	.2932	.2207	.3568

ALPHA (3) = 3.937 BETA (2) = .151 MACH = .89917 0 = 599.47 P = 1059.2 RNL = 3.5759

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.5049	.3888	.5330	.4978	3821
	.025	-.0589	-.2683	.0054	.1115	.0485
	.050	-.0861	-.0345	.2014	.2893	.1819
	.150	-.0082	-.3497	.2550	.2700	.2103
	.300	-.0914	-.0122	.3545	.3135	.2086
	.520	-.1900	.4128	.5072	.3673	.0368
	.695	-.2172	.6512	-.1915	.5346	.3249
	.775	-.2647	.4739	.4714	.4178	-.3454
	.900		.2317	.2531	.2014	.1346

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (3) = 3.940 BETA (3) = 4.207 MACH = .89917 Q = 599.47 P = 1059.2 RVL = 3.5758
 SECTION 11 VERTICAL
 DEPENDENT VARIABLE CP

Z/BV	X/CV						
.1580	.3170	.4590	.6020	.6970	.8390	.9250	

Z/BV	X/CV						
.000	.3765	.2377	.2368	.1818	.0980		
.025	-.2998	-.7290	-.3587	-.0593	-.0101		
.050	-.2143	-.6968	-.3418	-.0683	-.0001		
.150	-.1912	-.4089	-.3068	-.0905	-.0302		
.300	-.3219	-.1715	.0558	.0391	-.1113		
.520	-.3214	.3199	.4288	.1382	-.2065		
.695	-.2567	.5142	.2046	.5001	.3559	.0543	-.3589
.775	-.2912	.4052	.4091	.3700	.2454	.0121	-.3862
.900	.2311	.2238	.1715	.1756	.0721	-.4048	

ALPHA (4) = 7.890 BETA (4) = -3.900 MACH = .89940 Q = 599.79 P = 1059.2 RVL = 3.5790
 SECTION 11 VERTICAL
 DEPENDENT VARIABLE CP

Z/BV	X/CV						
.1580	.3170	.4590	.6020	.6970	.8390	.9250	

Z/BV	X/CV						
.000	.3889	.1906	.2597	.3252	.2666		
.025	-.2029	.1549	.4328	.4167	.3393		
.050	.2121	.1583	.4012	.4014	.3195		
.150	.0854	.0907	.3778	.3469	.2496		
.300	-.0083	.0836	.4086	.3231	.2019		
.520	-.1312	.4524	.5312	.3435	.0175		
.685	-.2212	.6799	.2003	.5418	.4420	.2831	-.3512
.775	-.2952	.5313	.4909	.3988	.3126	.1361	-.3643
.900	.3655	.2833	.1964	.1211	-.0792	-.3801	

ALPHA (4) = 7.894 BETA (4) = -145 MACH = .89940 Q = 599.79 P = 1059.2 RVL = 3.5790
 SECTION 11 VERTICAL
 DEPENDENT VARIABLE CP

Z/BV	X/CV						
.1580	.3170	.4590	.6020	.6970	.8390	.9250	

Z/BV	X/CV						
.000	.4657	.3101	.4828	.4373	.3236		
.025	-.0953	-.2899	-.0148	.0939	.0179		
.050	.0550	-.0577	.1626	.2597	.1351		
.150	-.0311	-.0831	.2297	.2376	.1717		
.300	-.1278	-.0393	.3300	.2740	.1650		
.520	-.2204	.7798	.4717	.3140	-.0065		
.685	-.2730	.6261	-.1937	.4107	.2687	-.3967	
.775	-.2758	.4606	.4668	.3783	.3052	.1245	-.3613
.900	.3101	.2474	.1700	.1002	-.0958	-.3783	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 110DA/B/C/R ORB VERTICAL
 SECTION 11 VERTICAL

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 XEBVII
 RNL = 3.5790

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3595 .1906 .1656 .0987 .0200

.025 -.2447 -.7408 -.4140 -.1009 -.0432

.050 -.1347 -.6870 -.4095 -.0954 -.0229

.150 -.1736 -.4118 -.3597 -.1456 -.0616

.300 -.3244 -.2050 -.1737 -.0344 -.1375

.520 -.3479 -.2979 -.3845 -.1128 -.1950

.695 -.2640 .5284 -.2022 .4478 .3618 .0138 -.3592

.775 -.2940 .4073 .4046 .3109 .2902 .0045 -.3918

.900 -.2389 .2128 .1142 .1149 .0803 -.4133

ALPHA (5) = 11.932 BETA (3) = -3.884 MACH = .89887

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3717 .1619 .1796 .2327 .1735

.025 .2255 .0282 .3916 .3935 .3046

.050 .0735 .0529 .3676 .3683 .2822

.150 -.0192 .0244 .35C4 .3128 .2128

.300 -.1045 .0327 .3685 .2868 .1621

.520 -.1859 .4423 .4984 .3042 -.0320

.685 -.2577 .6751 -.2401 .5015 .2393 -.3626

.775 -.3027 .5294 .4716 .3695 .2797 .0988 -.3801

.900 .3736 .2699 .1701 .0926 -.1112 -.4019

ALPHA (5) = 11.939 BETA (2) = .149 MACH = .89887

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4061 .2653 .4439 .3935 .2879

.025 -.0418 -.2914 -.0376 .0777 -.0004

.050 .0213 -.1189 .1318 .2120 .1132

.150 -.0642 -.1118 .2044 .2080 .1448

.300 -.1728 -.0754 .2976 .2430 .1365

.520 -.2531 .3336 .4434 .2914 -.0382

.685 -.2555 .5532 -.2386 .4739 .3966 .2380 -.3645

.775 -.2962 .4252 .4158 .3423 .2833 .1030 -.3775

.900 .2659 .2140 .1444 .0829 -.1138 -.3830

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4061 .2653 .4439 .3935 .2879

.025 -.0418 -.2914 -.0376 .0777 -.0004

.050 .0213 -.1189 .1318 .2120 .1132

.150 -.0642 -.1118 .2044 .2080 .1448

.300 -.1728 -.0754 .2976 .2430 .1365

.520 -.2531 .3336 .4434 .2914 -.0382

.685 -.2555 .5532 -.2386 .4739 .3966 .2380 -.3645

.775 -.2962 .4252 .4158 .3423 .2833 .1030 -.3775

.900 .2659 .2140 .1444 .0829 -.1138 -.3830

ALPHA (5) = 11.932 BETA (3) = -3.884 MACH = .89887

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4061 .2653 .4439 .3935 .2879

.025 -.0418 -.2914 -.0376 .0777 -.0004

.050 .0213 -.1189 .1318 .2120 .1132

.150 -.0642 -.1118 .2044 .2080 .1448

.300 -.1728 -.0754 .2976 .2430 .1365

.520 -.2531 .3336 .4434 .2914 -.0382

.685 -.2555 .5532 -.2386 .4739 .3966 .2380 -.3645

.775 -.2962 .4252 .4158 .3423 .2833 .1030 -.3775

.900 .2659 .2140 .1444 .0829 -.1138 -.3830

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

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ALPHA (5)	=	11.928	BETA (3)	=	4.228	MACH	=	.69887	0	=	599.34	P	=	1059.7	RWL	=	3.5747
SECTION : 11 VERTICAL									DEPENDENT VARIABLE CP								
Z/BV	.	.1590	.	.3170	.	.4590	.	.6020	.	.6970	.	.8390	.	.9250			(XEBV11)
X/CV	.000	.3592		.1804				.0857				.0343		.0507			
	.025	-.1305		-.6064				-.4820				-.1135		-.0505			
	.050	-.0649		-.4842				-.4687				-.1054		-.0376			
	.150	-.1309		-.3403				-.4351				-.1464		-.0756			
	.300	-.2886		-.2608				-.2102				-.0759		-.1471			
	.520	-.3738		.2277				.3547				.0829		-.2856			
	.685	-.2836		.4540		-.2463		.4042		.3516		.0164		-.3645			
	.775	-.2939		.3360		.3540		.2778		.2592		.0504		-.3927			
	.900			.1790		.1535		.0912		.0814		-.0132		-.4118			

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

(XE0V12)

ALPHA (1) = -4.017 BETA (3) = .163 MACH = .59336 P = 593.96 R = 2385.7 RNL = 4.8160

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CSV .000 .5295 .5057 -.5933 .5325 .4493

.025 .0268 -.2027 -.0345 .0950 -.0722

.050 .1415 .0557 .1701 .1910 .1530

.150 .0808 .0354 .2232 .2282 .1733

.300 .0138 .0421 .3072 .2765 .1712

.520 -.1998 .3535 .4929 .3603 .0511

.695 -.2750 .5799 .2005 .4649 .3494 -.3019

.775 -.2769 .3951 .4035 .2982 .1681 -.3139

.900 .1653 .1374 .1058 .0691 -.0127 -.3460

ALPHA (1) = -4.026 BETA (4) = 4.234 MACH = .59336 O = 593.96 P = 2385.7 RNL = 4.8160

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CSV .000 .3545 .2404 .2892 .1366 .1103

.025 .2504 .4617 .2905 .1703 .4389

.050 .2025 .3863 .2274 .1458 .3355

.150 .1618 .2423 .0646 .1631 .2266

.300 .1390 .0957 .1321 .1159 .1430

.520 .2578 .2390 .3768 .2889 .0272

.685 .3101 .4447 .1966 .4068 .2968

.775 .2912 .3177 .3289 .2982 .2354

.900 .1284 .0744 .0797 .0240 .0064

ALPHA (1) = -4.040 BETA (5) = 8.307 MACH = .59336 O = 593.96 P = 2385.7 RNL = 4.8160

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CSV .000 -.0358 -.3967 -.2595 -.1768 -.1549

.025 -.5028 -.9765 -.5830 -.2452 -.1771

.050 -.5016 -.7651 -.5815 -.2466 -.1695

.150 -.6841 -.7254 -.5558 -.2516 -.1580

.300 -.2966 -.3771 -.4896 -.2733 -.1847

.520 -.3336 -.2579 -.0965 -.3081 -.3197

.665 -.2243 -.2313 -.2025 -.2239 -.3336

.775 -.2117 -.1988 -.2315 -.1593 -.3210 -.4216

.900 .0417 .0553 .1441 -.0487 -.2712 -.4488

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

ALPHA : 2) = .052 BETA (4) = 4.215 MACH = .59654 0 = 594.31 P = 2385.7 RNL = 4.8134
 SECTION : INVERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3145 .1819 .2131 .0742 .03C9

.025 -.3030 .4952 .3074 -.1931 -.3982

.050 -.2629 .4281 .2513 -.3097

.150 -.2635 .2654 .1286 -.2125

.250 -.1831 .1125 .1096 .1372 .1106

.520 -.2831 .2272 .3652 .251 .0101

.825 -.3039 .4233 .4080 .3286 .2590 .3128

.75 -.2903 .3012 .3008 .2763 .1990 .1254 .3326

.900 .0912 .0605 .0611 .0135 .0463 .3402

ALPHA : 2) = .049 BETA (5) = 8.271 MACH = .59654 0 = 594.31 P = 2385.7 RNL = 4.8134
 SECTION : INVERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .0863 -.4799 -.3403 -.2402 -.2358

.025 -.5566 .9389 .5897 .2585 .1846

.250 -.5633 -.8203 .5972 .2611 .1772

.150 -.7349 .8392 .5811 .2725 .1796

.300 -.3320 .3798 .5121 .2987 .1982

.222 -.3534 .0937 .0871 .3091 .3294

.65 -.3301 .2716 -.1886 .0375 .3763 .4028

.775 -.3124 .2256 .1812 .1709 .1446 .3478 .4166

.900 .0575 .0355 .1136 .0469 .2958 .4383

ALPHA : 3) = 3.956 BETA (1) = -7.937 MACH = .59690 0 = 595.02 P = 2385.7 RNL = 4.8206
 SECTION : INVERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 -.0677 -.3617 -.3575 -.1020 -.0937

.025 .4245 .4015 .4944 .4409 .3562

.250 -.3790 .3581 .4756 .4238 .3417

.150 .2451 .2499 .4076 .3515 .2419

.300 .1265 .1268 .3891 .3011 .1708

.363 -.0386 .4014 .4652 .3071 .0061

.685 -.2752 .5339 -.1675 .4732 .4041 .2539 .2984

.775 -.2966 .4655 .3957 .3187 .2577 .1179 .3151

.910 .2418 .1443 .0901 .0497 -.0268 -.3003

DATE 14 FEB 76

TABULATED PRESSURE DATA - CA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

(XE00V12)

ALPHA (3) = 3.958 SECTION (1) VERTICAL

(XE00V12)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV	.000	.2868	.1542	.1844	.2564	.1635
.025	.2594	.2350	.3898	.3551	.3580	.2941
.050	.2336	.2129			.3413	.2726
.150	.1259	.1402			.2795	.1943
.300	.0248	.0994			.2593	.1386
.500	-.1664	.3595			.2997	-.0019
.685	-.2763	.5781	.1664	.4003	.2584	-.3060
.775	-.2801	.4203	.3744	.2971	.2377	.1067
.900		.2993	.1352	.0786	.0377	-.3424

ALPHA (3) = 3.957 SECTION (1) VERTICAL

(XE00V12)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV	.000	.4510	.4024	.4828	.4143	.3162
.025	-.0337	-.2496		-.0418	.0172	-.0846
.050	.0643	-.0065		.1294	.1599	.0983
.150	-.0628	-.0278		.1805	.1661	.1123
.300	-.0764	-.0085		.2550	.2098	.1064
.520	-.2336	.3095	.5529	.4181	.2816	.0082
.685	-.2805	.3744	.1676	.4514	.2600	.3137
.775	-.2705	.3724	.3494	.2815	.2267	.0943
.935		.1570	.0915	.0536	.0068	-.3466

ALPHA (3) = 3.954 SECTION (1) VERTICAL

(XE00V12)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV	.000	.2723	.1213	.1377	-.0028	.0474
.025	-.3259	-.5172		-.3328	-.2276	-.3540
.050	-.2978	-.4741		-.2761	-.2178	-.2919
.150	-.2992	-.3033		-.2114	-.3326	-.1690
.300	-.2018	-.1327		-.1132	.1415	.0581
.520	-.2926	.2182		-.3382	-.2163	-.0640
.685	-.2899	.4148	-.1770	.3870	.2760	.2085
.775	-.2785	.2914	.2905	.2539	.1640	.0833
.935		.0805	.0550	.0317	-.0320	-.3295

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DATE 14 FEB 75

TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

PAGE 6626

ALPHA (3) = 3.950 BETA (5) = 8.252 MACH = .59690 0 = 595.02 P = 2385.7 RN/L = 4.82026
 SECTION 1: INVERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CY	1.310	-5364	-4033	-2843	-2805
.025	.5999	-1.0112	-6004	-6113	-2771	-1931
.050	.6273	-6718	-6108	-5343	-2750	-1895
.150	-7556	-9458	-6108	-475	-2852	-1862
.300	-3535	-3431	-5343	-3047	-2093	
.500	-3581	C279	-0475	-3228		
.695	-3233	-3445	-1808	-2859	-3830	-3833
.775	-3051	-2772	-1246	-1443	-0970	-3959
.903	-2872	-0246	.0601	.0212	.2995	-4140

ALPHA (4) = 7.954 BETA (1) = -7.922 MACH = .59690 0 = 595.02 P = 2385.7 RN/L = 4.82026
 SECTION 1: INVERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CY	-1293	-4481	-4286	-1654	-1440
.025	.3876	.3571	.4521	.4022	.3146	
.050	-3402	-3292	.4340	.3915	.3024	
.150	-2153	-2311	.3763	.3242	.2230	
.300	-11093	-1167	.3544	.2811	.1620	
.500	-11071	-3955	.4324	.2811	.0078	
.695	-2703	-6482	-1645	.4400	.2360	-2527
.775	-2699	-2699	.3722	.2933	.2364	-1158
.903	-2698	-2698	.1648	.0602	.0450	-2553

ALPHA (4) = 7.953 BETA (2) = -3.891 MACH = .59690 0 = 595.02 P = 2385.7 RN/L = 4.82026
 SECTION 1: INVERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CY	2742	-1123	1389	1878	1062
.025	.2050	.2632	.3556	.3204	.2541	
.050	.1934	.820	.3249	.3019	.2369	
.150	.0975	.127	.2902	.2470	.1545	
.300	-1.0036	.0837	.2986	.2220	.1114	
.500	-1.1793	.2752	.4200	.2617	.0302	
.695	-1.0827	.1657	.4319	.3546	.2168	-2998
.775	-1.283	.1123	.2497	.2044	.0775	-3174
.903	-1.232	.1120	.0562	.0139	.0695	-3376

(XE8V12)

(XE8V12)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140AV/B/C/R ORB VERTICAL

PAGE 6627

ALPHA (4) = 7.912 BETA (3) = .160 MACH = .59690 Q = 595.02 P = 2385.7 RN/L = 4.8202

SECTION 1 INVERTICAL

X/CV	.000	.4246	.3612	.4319	.3587	.2721
.025	-.0597	-.2771	-.0723	-.0051	-.1152	
.050	.0323	-.0391	.1079	.1345	.0720	
.150	-.0335	-.0643	.1571	.1345	.0861	
.350	-.1025	-.1027	.2317	.1739	.0808	
.650	-.2432	-.3062	.3953	.2422	.0437	
.855	-.2761	-.5397	-.1572	.4117	.3320	.2124
.775	-.2630	-.3614	.3228	.2519	.1953	.0689
.555		.1526	.0713	.0230	-.0181	-.0857
						-.3639

ALPHA (4) = 7.910 BETA (4) = 4.204 MACH = .59690 Q = 595.02 P = 2385.7 RN/L = 4.8202

SECTION 1 INVERTICAL

X/CV	.000	.2561	.0379	.0696	.0665	.1124
.025	-.2556	-.5348	-.3553	-.2603	-.3331	
.050	-.3232	-.5245	-.3057	-.2603	-.2860	
.150	-.2443	-.2631	-.2790	-.3617	-.1183	
.350	-.2245	-.1419	.1224	.1260	.0086	
.650	-.3031	-.2133	.3254	.1856	.0857	
.735	-.2220	-.4.93	-.1514	.2301	.1562	
.775	-.2438	-.2944	.2767	.2182	.1402	.0433
.930		.0312	.0424	-.0024	-.0342	-.0874
						-.3317

ALPHA (4) = 7.903 BETA (5) = 8.256 MACH = .59690 Q = 595.02 P = 2385.7 RN/L = 4.8202

SECTION 1 INVERTICAL

X/CV	.000	-.1635	-.6117	-.4689	-.3337	-.3467
.025	-.6747	-.10517	-.5780	-.2933	-.2098	
.050	-.5821	-.9314	-.5954	-.2883	-.2088	
.150	-.8364	-.9692	-.6146	-.3106	-.2055	
.350	-.3650	-.3335	-.5431	-.3311	-.2286	
.620	-.3741	-.0535	-.0715	-.3171	-.3340	
.565	-.1523	-.2607	-.2242	-.2885	-.3795	-.3507
.775	-.3091	-.25.9	.1090	.0623	.1174	.3707
.930		.0752	-.0310	-.0036	-.2990	-.3712

ALPHA (4) = 7.903 BETA (5) = 8.256 MACH = .59690 Q = 595.02 P = 2385.7 RN/L = 4.8202

SECTION 1 INVERTICAL

X/CV	.000	-.1635	-.6117	-.4689	-.3337	-.3467
.025	-.6747	-.10517	-.5780	-.2933	-.2098	
.050	-.5821	-.9314	-.5954	-.2883	-.2088	
.150	-.8364	-.9692	-.6146	-.3106	-.2055	
.350	-.3650	-.3335	-.5431	-.3311	-.2286	
.620	-.3741	-.0535	-.0715	-.3171	-.3340	
.565	-.1523	-.2607	-.2242	-.2885	-.3795	-.3507
.775	-.3091	-.25.9	.1090	.0623	.1174	.3707
.930		.0752	-.0310	-.0036	-.2990	-.3712

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

PAGE 6629

ALPHA (5) = 11.959 BETA (4) = 4.216 MACH = .59660 Q = 594.43 P = 2385.7 R/L = 4.8162

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/B: .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.2838	.0497	.0054	-.1257	-.1845
.025	-.3218	-.5495	-.3849	-.2944	-.3067	
.050	-.2944	-.5311	-.3430	-.2906	-.2731	
.150	-.2438	-.2560	-.3225	-.3561	-.1537	
.300	-.2319	-.1525	-.1144	.0949	-.0553	
.520	-.2232	-.2042	-.2696	-.1303	-.0984	
.635	-.2631	-.4363	-.1709	.3155	.0994	-.3124
.775	-.2436	.2976	.2608	.1756	.1303	-.3267
.900	-.0952	.0264	-.0438	-.0419	-.1060	-.3401

ALPHA (5) = 11.959 BETA (5) = 8.279 MACH = .59660 Q = 594.43 P = 2385.7 R/L = 4.8162

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1560	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	-.1934	-.6749	-.5407	-.3808	-.4421		
.025	-.7595	-.0037	-.5782	-.3204	-.2459		
.050	-.7765	-.9513	-.5889	-.3192	-.2445		
.150	-.4554	-.9771	-.6034	-.3416	-.2533		
.300	-.4621	-.3572	-.5937	-.3625	-.2757		
.520	-.4606	-.0414	-.1599	-.3701	-.3725		
.595	-.3712	.2312	-.1789	-.1413	-.4317	-.3947	
.775	-.3662	.2381	.1352	.0054	-.2051	-.4284	-.3775
.900	-.0612	-.0122	-.0024	-.0690	-.3468	-.4173	

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

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(XEBV13) 4 13 AUS 75)

REFERENCE DATA

Z-EF	=	.5500 .0000	SC.FT.	X-NP	=	1076.6800 IN.	XO		RUDDER =	.000	SPOILER =	.000
L-EF	=	.414 .5852	IN.	Y-NP	=	.0003 IN.	YO		BDFLAP =	.000	L-ELVN =	.000
B-EF	=	.335 .0000	IN.	Z-NP	=	.375.0000 IN.	ZO		R-ELVN =	.000	MACH =	.400
SC-E	=	.020										

ALPHA (1) = -.106 BETA (1) = -3.886 MACH = 1.3946 Q = 599.93 P = 440.65 RNL = 2.9118

SECTION 1 INVERTICAL DEPENDENT VARIABLE CP

Z: 5.0 .1580 .3170 .4590 .6020 .6970 .8390 .9250

1.000	-.861	.6764	.5507	.6606	.6474		
.998	.6152	.5212	.4667	.4743	.4769		
.996	.6280	.5242	.4564	.4650	.4776		
.994	.6336	.5258	.3938	.4068	.4230		
.992	.6333	.5258	.3125	.4258	.3629		
.990	.6344	.5214	.3118	.3519	.3083		
.988	.6352	.5247	.2918	.4126	.1663		
.986	.6357	.5282	.2282	.3367	.3106	-.1556	
.984	.6366	.5297	.1737	.2626	.2618	.1354	-.2462

ALPHA (1) = -.073 BETA (2) = -154 MACH = 1.3946 Q = 599.93 P = 440.65 RNL = 2.9118

SECTION 1 INVERTICAL DEPENDENT VARIABLE CP

Z: 8.0 .1580 .3170 .4590 .6020 .6970 .8390 .9250

1.000	.9332	.7423	.7058	.6635	.5939		
.998	.2801	.1493	.0289	.0185	.0603		
.996	.4602	.3521	.0742	.0371	.0031		
.994	.4349	.2812	.2235	.2244	.2191		
.992	.4760	.2110	.1851	.2130	.2314		
.990	.4631	.1263	.1337	.1720	.2336		
.988	.4626	.1160	.1550	.2817	.3672	-.1884	
.986	.4635	.1152	.1340	.2297	.2403	.2479	-.1672
.984	.4627	.1152	.1340	.1679	.1819	.0774	-.2144

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6531

ALPHA (1) = -.039
 SECTION (1) VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV .000 .7657 .6638 .6104 .5356 .4563
 .025 .0942 -.0745 -.1341 -.4824 -.5293
 .050 .1094 -.0805 -.1195 -.4519 -.4913
 .150 .2087 .0356 -.0500 -.3363 -.3458
 .300 .2105 .0805 .0326 .0205 -.1815
 .520 .0449 .0084 .0733 .1474 .1841
 .685 -.3845 -.0221 -.1647 .1652 .3045 -.1796
 .775 -.3689 -.0637 .0408 .0956 .1318 .1982 -.1818
 .900 -.1197 -.0081 .0695 .0880 .0339 -.2418

ALPHA (2) = -.C33
 SECTION (1) VERTI
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV .000 .7126 .5933 .5743 .5608 .5511
 .025 .5212 .4449 .3872 .3931 .3890
 .050 .5411 .4458 .3836 .3879 .3928
 .150 .4486 .3461 .3198 .3286 .3302
 .300 .3112 .2597 .2397 .3317 .3317
 .520 .1538 .1477 .1762 .2756 .2756
 .685 -.3476 .0665 -.1574 .3446 .3180 .1858
 .775 -.3445 .0365 .1648 .2383 .2699 .2675 .1820
 .900 -.0050 .1129 .2097 .2121 .1171 -.2749

ALPHA (2) = -.028
 SECTION (1) VERTI
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV .000 .7599 .6692 .6224 .5851 .4785
 .025 .2119 .0938 -.0227 -.0255 -.1067
 .050 .3944 .2920 .0141 -.0146 -.0553
 .150 .3723 .2149 .1621 .1621 .1505
 .300 .2232 .1464 .1222 .1492 .1403
 .520 .0689 .0523 .1279 .2074 .1729
 .685 -.3904 .0127 -.1537 .1359 .2262 .2177
 .775 -.3546 .0319 .0837 .1459 .1761 .2001 .2146
 .900 -.0964 .0254 .1112 .1231 .0488 -.2730

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL
 DEPENDENT VARIABLE CP
 (XEBV3)

ALPHA (1) = .4249 MACH = 1.3946 Q = 599.93 P = 440.65 R/N/L = 2.9118

ALPHA (1) = -.1644 MACH = 1.3950 Q = 599.93 P = 440.61 R/N/L = 2.9115

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6532

ALPHA (2) = - .033 BETA (3) = 4.229 MACH = 1.3950 Q = 599.93 P = 440.41 RNL = 2.9115

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6871 .5972 .5367 .4546 .3661

.025 -.0355 -.1372 -.4395 -.1908 -.5376

.050 .0342 -.1365 -.4267 -.4628 -.4988

.150 .1448 -.0278 -.0679 -.3560 -.3720

.300 .1516 .0480 -.0242 -.0159 -.1837

.520 -.0041 -.0387 -.0093 -.0159 -.1207

.685 .4165 -.0678 -.0678 .0814 -.2092

.775 .3597 -.1164 -.0105 .0460 .1489 -.2175

.900 -.1654 -.00557 .0216 .0420 .0043 -.2813

ALPHA (3) = 3.851 BETA (1) = -3.904 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6230 .5285 .4938 .4592 .4516

.025 .3756 .3588 .3005 .3093 .2958

.050 .4179 .3642 .3013 .3058 .3099

.150 .3453 .2687 .2457 .2497 .2420

.300 .2356 .1982 .1680 .2350 .2372

.520 .0908 .0825 .1562 .2108 .1806

.685 -.4083 .0213 -.1713 .1163 .2884 .2537 -.2139

.775 -.3519 -.0178 .1057 .1849 .2154 -.2177

.900 -.0538 .0600 .1443 .1583 .0843 -.2984

ALPHA (3) = 3.949 BETA (2) = -141 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6625 .5979 .5339 .4706 .3889

.025 .1664 .0629 -.0534 -.0650 -.1333

.050 .3289 .2555 -.0394 -.0603 -.0867

.150 .3266 .1682 .1076 .038 .0960

.300 .1687 .0885 .0630 .0931 .0772

.520 .0163 -.0003 .0590 .1529 .1146

.685 -.4096 -.0335 -.1627 .1747 -.2397

.775 -.2317 -.0732 .0322 .0976 .1192 .1488

.900 -.1350 -.0227 .0590 .0734 .0182 -.2554

ALPHA (2) = - .033 BETA (3) = 4.229 MACH = 1.3950 Q = 599.93 P = 440.41 RNL = 2.9115

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6871 .5972 .5367 .4546 .3661

.025 -.0355 -.1372 -.4395 -.1908 -.5376

.050 .0342 -.1365 -.4267 -.4628 -.4988

.150 .1448 -.0278 -.0679 -.3560 -.3720

.300 .1516 .0480 -.0242 -.0159 -.1837

.520 -.0041 -.0387 -.0093 -.0159 -.1207

.685 .4165 -.0678 -.0678 .0814 -.2092

.775 .3597 -.1164 -.0105 .0460 .1489 -.2175

.900 -.1654 -.00557 .0216 .0420 .0043 -.2813

ALPHA (3) = 3.851 BETA (1) = -3.904 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6230 .5285 .4938 .4592 .4516

.025 .3756 .3588 .3005 .3093 .2958

.050 .4179 .3642 .3013 .3058 .3099

.150 .3453 .2687 .2457 .2497 .2420

.300 .2356 .1982 .1680 .2350 .2372

.520 .0908 .0825 .1562 .2108 .1806

.685 -.4083 .0213 -.1713 .1163 .2884 .2537 -.2139

.775 -.3519 -.0178 .1057 .1849 .2154 -.2177

.900 -.0538 .0600 .1443 .1583 .0843 -.2984

ALPHA (3) = 3.949 BETA (2) = -141 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6625 .5979 .5339 .4706 .3889

.025 .1664 .0629 -.0534 -.0650 -.1333

.050 .3289 .2555 -.0394 -.0603 -.0867

.150 .3266 .1682 .1076 .038 .0960

.300 .1687 .0885 .0630 .0931 .0772

.520 .0163 -.0003 .0590 .1529 .1146

.685 -.4096 -.0335 -.1627 .1747 -.2397

.775 -.2317 -.0732 .0322 .0976 .1192 .1488

.900 -.1350 -.0227 .0590 .0734 .0182 -.2554

ALPHA (2) = - .033 BETA (3) = 4.229 MACH = 1.3950 Q = 599.93 P = 440.41 RNL = 2.9115

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6871 .5972 .5367 .4546 .3661

.025 -.0355 -.1372 -.4395 -.1908 -.5376

.050 .0342 -.1365 -.4267 -.4628 -.4988

.150 .1448 -.0278 -.0679 -.3560 -.3720

.300 .1516 .0480 -.0242 -.0159 -.1837

.520 -.0041 -.0387 -.0093 -.0159 -.1207

.685 .4165 -.0678 -.0678 .0814 -.2092

.775 .3597 -.1164 -.0105 .0460 .1489 -.2175

.900 -.1654 -.00557 .0216 .0420 .0043 -.2813

ALPHA (3) = 3.851 BETA (1) = -3.904 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6230 .5285 .4938 .4592 .4516

.025 .3756 .3588 .3005 .3093 .2958

.050 .4179 .3642 .3013 .3058 .3099

.150 .3453 .2687 .2457 .2497 .2420

.300 .2356 .1982 .1680 .2350 .2372

.520 .0908 .0825 .1562 .2108 .1806

.685 -.4083 .0213 -.1713 .1163 .2884 .2537 -.2139

.775 -.3519 -.0178 .1057 .1849 .2154 -.2177

.900 -.0538 .0600 .1443 .1583 .0843 -.2984

ALPHA (3) = 3.949 BETA (2) = -141 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6625 .5979 .5339 .4706 .3889

.025 .1664 .0629 -.0534 -.0650 -.1333

.050 .3289 .2555 -.0394 -.0603 -.0867

.150 .3266 .1682 .1076 .038 .0960

.300 .1687 .0885 .0630 .0931 .0772

.520 .0163 -.0003 .0590 .1529 .1146

.685 -.4096 -.0335 -.1627 .1747 -.2397

.775 -.2317 -.0732 .0322 .0976 .1192 .1488

.900 -.1350 -.0227 .0590 .0734 .0182 -.2554

ALPHA (2) = - .033 BETA (3) = 4.229 MACH = 1.3950 Q = 599.93 P = 440.41 RNL = 2.9115

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6871 .5972 .5367 .4546 .3661

.025 -.0355 -.1372 -.4395 -.1908 -.5376

.050 .0342 -.1365 -.4267 -.4628 -.4988

.150 .1448 -.0278 -.0679 -.3560 -.3720

.300 .1516 .0480 -.0242 -.0159 -.1837

.520 -.0041 -.0387 -.0093 -.0159 -.1207

.685 .4165 -.0678 -.0678 .0814 -.2092

.775 .3597 -.1164 -.0105 .0460 .1489 -.2175

.900 -.1654 -.00557 .0216 .0420 .0043 -.2813

ALPHA (3) = 3.851 BETA (1) = -3.904 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6230 .5285 .4938 .4592 .4516

.025 .3756 .3588 .3005 .3093 .2958

.050 .4179 .3642 .3013 .3058 .3099

.150 .3453 .2687 .2457 .2497 .2420

.300 .2356 .1982 .1680 .2350 .2372

.520 .0908 .0825 .1562 .2108 .1806

.685 -.4083 .0213 -.1713 .1163 .2884 .2537 -.2139

.775 -.3519 -.0178 .1057 .1849 .2154 -.2177

.900 -.0538 .0600 .1443 .1583 .0843 -.2984

ALPHA (3) = 3.949 BETA (2) = -141 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6625 .5979 .5339 .4706 .3889

.025 .1664 .0629 -.0534 -.0650 -.1333

.050 .3289 .2555 -.0394 -.0603 -.0867

.150 .3266 .1682 .1076 .038 .0960

.300 .1687 .0885 .0630 .0931 .0772

.520 .0163 -.0003 .0590 .1529 .1146

.685 -.4096 -.0335 -.1627 .1747 -.2397

.775 -.2317 -.0732 .0322 .0976 .1192 .1488

.900 -.1350 -.0227 .0590 .0734 .0182 -.2554

ALPHA (2) = - .033 BETA (3) = 4.229 MACH = 1.3950 Q = 599.93 P = 440.41 RNL = 2.9115

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6871 .5972 .5367 .4546 .3661

.025 -.0355 -.1372 -.4395 -.1908 -.5376

.050 .0342 -.1365 -.4267 -.4628 -.4988

.150 .1448 -.0278 -.0679 -.3560 -.3720

.300 .1516 .0480 -.0242 -.0159 -.1837

.520 -.0041 -.0387 -.0093 -.0159 -.1207

.685 .4165 -.0678 -.0678 .0814 -.2092

.775 .3597 -.1164 -.0105 .0460 .1489 -.2175

.900 -.1654 -.00557 .0216 .0420 .0043 -.2813

ALPHA (3) = 3.851 BETA (1) = -3.904 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6230 .5285 .4938 .4592 .4516

.025 .3756 .3588 .3005 .3093 .2958

.050 .4179 .3642 .3013 .3058 .3099

.150 .3453 .2687 .2457 .2497 .2420

.300 .2356 .1982 .1680 .2350 .2372

.520 .0908 .0825 .1562 .2108 .1806

.685 -.4083 .0213 -.1713 .1163 .2884 .2537 -.2139

.775 -.3519 -.0178 .1057 .1849 .2154 -.2177

.900 -.0538 .0600 .1443 .1583 .0843 -.2984

ALPHA (3) = 3.949 BETA (2) = -141 MACH = 1.3941

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6625 .5979 .5339 .4706 .3889

.025 .1664 .0629 -.0534 -.0650 -.1333

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

(XEBV13)

ALPHA (3) = 3.662 BETA (3) = 4.219 MACH = 1.3941 Q = 600.12 P = 441.12 RNL = 2.9157

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.5846	.5412	.4578	.3716	.3025
	.025	-.1033	-.1623	-.4407	-.4917	-.5460
	.050	-.0149	-.1454	-.4285	-.4763	-.5043
	.150	-.1396	-.0341	-.1064	-.3759	-.3939
	.300	.0979	-.0132	-.0796	-.0686	-.1269
	.520	-.0743	-.0973	-.0762	.0181	.0396
	.685	-.3637	-.1281	-.1684	-.1262	-.2419
	.775	-.3407	-.1658	-.0615	-.0012	.0183
	.900	-.2092	-.1012	-.0297	-.0104	-.0351

ALPHA (4) = 7.881 BETA (1) = -3.904 MACH = 1.3932 Q = 600.00 P = 441.59 RNL = 2.9150

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.5931	.4880	.4278	.3767	.3699
	.025	.2478	.2862	.2352	.2649	.2262
	.050	.3869	.3054	.2359	.2385	.2422
	.150	.2838	.2153	.1820	.1879	.1819
	.300	.1513	.1255	.1155	.1689	.1798
	.520	.0389	.0389	.0591	.1554	.1254
	.685	-.4200	-.0033	-.1863	.2342	.2010
	.775	-.3866	-.0381	-.0666	.1314	.1449
	.900	-.0929	-.0164	-.0893	.1062	.0597

ALPHA (4) = 7.933 BETA (2) = 1.128 MACH = 1.3932 Q = 600.00 P = 441.59 RNL = 2.9150

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6899	.5224	.4413	.3744	.3185
	.025	.1881	.0272	-.0834	-.1045	-.1613
	.050	-.3489	.2054	-.0820	-.1143	-.1183
	.150	.2947	.1121	-.0558	-.0428	-.0374
	.300	-.1112	.0328	-.0009	.0331	.0191
	.520	-.0424	-.0555	-.0061	.0950	.0584
	.685	-.4323	-.0765	-.1717	.1165	.1359
	.775	-.3295	-.1118	-.0153	.0357	.2667
	.900	-.1733	-.0674	.0001	.0202	-.0120

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

(XEBV13)

ALPHA (4) = 7.934 BETA (3) = 4.214 MACH = 1.3932 Q = 600.00 P = 441.59 RNL = 2.9150

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.5467	.5081	.3861	.2905	.2473
.025	.0991	-.1534	-.3810	-.4612	-.5440
.050	.1495	-.1273	-.3895	-.4660	-.4990
.150	.2379	-.0071	-.1666	-.3037	-.3853
.300	.0441	-.0558	-.1339	-.1198	-.1110
.520	-.1179	-.1430	-.1085	-.0216	-.0294
.685	-.3811	-.1792	-.0328	.0405	.0396
.775	-.3437	-.2059	-.1005	-.0477	-.0366
.900	-.2407	-.1459	-.0786	-.0556	-.0706

ALPHA (5) = 11.884 BETA (1) = -3.887 MACH = 1.3946 Q = 599.92 P = 440.65 RNL = 2.9165

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6461	.4535	.3590	.3001	.2924
.025	.2526	.2594	.1837	.1844	.1685
.050	.4163	.2700	.1811	.1763	.1780
.150	.2606	.1621	.1246	.1270	.1223
.300	.0806	.0558	.0597	.1051	.1202
.520	-.0378	-.0205	.0480	.1187	.0959
.685	-.4273	-.0236	-.1786	.0720	.1628
.775	-.3775	-.0558	-.0478	.0962	.0990
.900	-.1147	-.0040	.0535	.0582	.0412

ALPHA (5) = 11.891 BETA (2) = -152 MACH = 1.3946 Q = 599.92 P = 440.65 RNL = 2.9165

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6757	.4807	.3783	.3044	.2482
.025	.1701	.0046	-.1148	-.1324	-.1078
.050	.3309	.1755	-.1207	-.1475	-.1518
.150	.2818	.0826	.0093	-.0002	-.0130
.300	.0848	-.0016	-.0439	-.0135	-.0299
.520	-.0792	-.0956	-.0575	.0452	.0116
.685	-.4457	-.1129	-.1789	.0132	.0700
.775	-.3555	-.1426	-.0547	.0026	.0112
.900	-.1932	-.1028	-.0406	-.0232	-.0399

.3430

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL.

ALPHA (5) = 11.887 BETA (3) = 4.229 MACH = 1.3946 Q = 599.92 P = 440.65 RN/L = 2.9185

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.6166	.4663	.3108	.2086	.1763				
.000	.1085	.1580	.3931	.4587	.5229				
.025	.1688	.1437	.4050	.4618	.5017				
.050	.2292	.0398	.1986	.2364	.3733				
.150	.0436	.0811	.1591	.1741	.1805				
.300	.1473	.1701	.1382	.0774	.0588				
.520	.4120	.2111	.1688	.0164	.0223	-3041			
.685	.3598	.2301	.1337	.0941	.0822	.3248			
.775	.2756	.1729	.1249	.1052	.1054	.3564			
.900									
ALPHA (6) = 15.888 BETA (1) = -3.863 MACH = 1.3935 Q = 600.21 P = 441.59 RN/L = 2.9216									
SECTION (1) VERTICAL									
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250									
X/CV	.7600	.5143	.3287	.2411	.2272				
.000	.2008	.1291	.1285	.1366	.1205				
.025	.0475	.2589	.1419	.1309	.1281				
.050	.2263	.1115	.0823	.0835	.0763				
.150	.0076	.0192	.0180	.0545	.0558				
.300	.1036	.1088	.0136	.0904	.0682				
.520	.4237	.0434	.2026	.1715	.1366	.2729			
.685	.3583	.0716	.0372	.0778	.0986	.2775			
.775	.180	.0018	.0415	.0483	.0256	.3510			
.900									
ALPHA (6) = 15.885 BETA (2) = .152 MACH = 1.3935 Q = 600.21 P = 441.59 RN/L = 2.9216									
SECTION : 1) VERTICAL									
Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250									
X/CV	.6921	.4931	.3298	.2398	.1839				
.000	.1712	.0232	.1473	.1644	.2114				
.025	.3121	.1514	.1549	.1753	.1700				
.050	.2721	.619	.0283	.0371	.0457				
.150	.0534	.1363	.0749	.0539	.0652				
.300	.1187	.1284	.0939	.032	.0258				
.520	.4522	.1360	.0440	.0386	.3136				
.685	.3720	.1654	.0800	.0369	.0052	.3311			
.775	.2178	.1230	.0709	.0561	.0666	.3763			
.900									

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(XEBV13)

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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ALPHA (6) = 15.903 BETA (3) = 4.263 MACH = 1.3935 Q = 600.21 P = 441.59 R/L = 2.9216
SECTION 1: VERTICAL
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

AMES 11-073(OAI4B) - 140A/B/C/R ORB VERTCN.
(XEBV13)

X/COV	.000	.7585	.5285	.2842	.1556	.1274
A	.025	.1295	-.1631	-.3710	-.4574	-.5124
B	.050	.2579	-.1185	-.3923	-.4626	-.5126
C	.150	.2837	.0070	-.2345	-.2777	-.3636
D	.250	.0222	-.0792	-.1630	-.1897	-.2125
E	.350	-.1335	-.1811	-.1625	-.1087	-.0795
F	.450	-.4525	-.2031	-.0937	-.0535	-.3198
G	.550	-.3751	-.2202	-.1456	-.1079	-.0581
H	.650	-.2746	-.1894	-.1393	-.1229	-.1115
I						-.3796

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

REFERENCE DATA

REF	2590.0000	SD.FT.	XMRP	=	1076.6800	IN. X0		
REF	474.8000	IN.	YMRP	=	.0000	IN. Y0		
REF	926.0580	IN.	ZMRP	=	375.0000	IN. Z0		
SCALE	.6350							
ALPHA (1)	-4.010	BETA (1) =	-3.884	MACH =	1.2452	0	=	599.70
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			P =	552.51
Z/BV	.1580	.3170	.4590	.5020	.6970	.8390	RNL =	3.0159
X/CV								
	.000	.7620	.6245	.6051	.6203	.5949		
	.025	.5923	.4545	.4172	.4347	.4377		
	.050	.5971	.4559	.4081	.4279	.4306		
	.150	.4835	.3527	.3359	.3820	.3542		
	.320	.3239	.2753	.2539	.3573			
	.520	.1581	.1258	.1064	.2839	.2758		
	.655	.4054	.3649	.3083	.3831	.3419		
	.775	.3290	.3547	.3139	.2575	.2632		
	.900	.0603	.1282	.1894	.1822	.2189		
ALPHA (1)	-3.944	BETA (2) =	.148	MACH =	1.2452	0	=	599.70
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			P =	552.51
Z/BV	.1580	.3170	.4590	.5020	.6970	.8390	RNL =	3.0159
X/CV								
	.000	.8089	.6863	.6604	.6273	.5678		
	.025	.2837	.0951	.0358	-.0658	-.1198		
	.050	.4702	.2549	.0141	-.0306	-.0678		
	.150	.3754	.2123	.1625	.1664	.1626		
	.300	.2171	.1425	.1305	.1968	.2024		
	.520	.0564	.0332	.1778	.1987	.1771		
	.665	.4429	.0612	.1712	.2156	.3242		
	.775	.3505	.0620	.0744	.1507	.1809		
	.900	.1114	.0215	.0921	.1117	.0306		

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IXE8V14) (13 AUG 75)

PARAMETRIC DATA

RUDDER	= .000	SPDBRK =	35.000
BOFLAP	= .000	L-ELVN =	1.000
R-ELVN	= .000	MACH =	1.250

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TABULATED PRESSURE DATA - OAI14B (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

(XEBV14)

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ALPHA (1) = -4.009 BETA (3) = 4.237 MACH = 1.2452 0 = 599.70 P = 552.51 RVL = 3.0159

SECTION 1: VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .7462 .6165 .5690 .4966 .4381
.025 -.0691 -.1651 -.4627 -.5669 -.6222
.050 -.1046 -.1551 -.1646 -.5832 -.5832
.150 .2013 .0005 -.1869 -.2593 -.4982
.300 .1415 .0209 .0390 -.0395 -.0313
.500 -.0243 -.0556 .0379 .0744 .1057
.595 -.4818 -.0959 -.1814 .0713 .1323 .2822
.775 -.3811 -.1333 -.0186 .0591 .0991 .0780 -.3134
.900 -.1355 -.0757 .0058 .0374 -.0651 -.3441

ALPHA (2) = .205 BETA (1) = -3.866 MACH = 1.2472 0 = 601.31 P = 552.29 RVL = 3.0212

SECTION 1: VERTICAL

Z/BY .1520 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6326 .5471 .5151 .5193 .5065
.025 .5915 .3772 .3274 .3376 .3514
.050 .5191 .3921 .3205 .3310 .3488
.150 .4977 .2919 .2545 .2789 .2663
.300 .2540 .1955 .1946 .2988 .2202
.500 .0653 .0680 .1975 .2129 .1820
.695 -.4549 -.0220 -.1750 .2536 .2854
.775 -.3394 -.0339 .1050 .1804 .2022 .1769
.900 -.0717 .0361 .1319 .1279 .0052 -.3352

ALPHA (2) = .220 BETA (2) = .185 MACH = 1.2472 0 = 601.31 P = 552.29 RVL = 3.0212

SECTION 1: VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .7482 .6176 .5786 .5315 .4485
.025 -.1983 .0201 -.1029 -.1172 -.1932
.050 .3725 .2305 -.0516 -.0959 -.1297
.150 .3159 .1461 .0970 .0948 .0868
.300 .1631 .0794 .0676 .0918 .1275
.600 -.0041 -.0254 -.0960 .1290 .1061
.685 .4805 -.0742 -.1679 .1531 .2256 -.3232
.775 .3276 .1223 .0045 .0778 .1117 .1121
.900 -.1770 -.0492 .0395 .0496 -.0608 -.3346

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

ALPHA (2) = .215 BETA (3) = 4.264 MACH = 1.2472 Q = 601.31 P = 552.29 RN/L = 3.0212

SECTION 11 VERTICAL

Z/BV -1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6691 .5450 .4849 .4067 .3272

.025 -.0315 -.2109 -.5229 -.5861 -.6489

.050 .0059 -.2038 -.5248 -.5978 -.6030

.150 .1257 -.0819 -.1660 -.3186 -.5050

.200 -.0659 -.1163 -.0933 -.1027 -.0886

.520 -.0796 -.1532 -.0425 -.0174 -.0405

.625 -.5056 -.1792 -.1742 -.0145 -.0875

.775 -.3792 -.9956 -.0832 -.0195 -.1045

.900 -.2545 -.2545 -.1329 -.0573 -.0343

ALPHA (3) = 3.903 BETA (1) = -3.872 MACH = 1.2473 Q = 600.93 P = 551.82 RN/L = 3.0266

SECTION 11 VERTICAL

Z/BV -1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6255 .4938 .4464 .4293 .4198

.025 .3864 .3020 .2526 .2533 .2651

.050 .4190 .3155 .2502 .2585 .2675

.150 .3240 .2213 .1881 .1985 .2132

.300 .1922 .1309 .1300 .2227 .1702

.520 .0295 .0109 .1224 .1506 .1212

.685 -.5130 -.0644 -.1835 .2097 .1216

.775 -.3397 -.0905 .0434 .1082 .1450

.900 -.1267 -.0053 .0819 .0809 -.0257

ALPHA (3) = 3.903 BETA (2) = .184 MACH = 1.2473 Q = 600.93 P = 551.82 RN/L = 3.0266

SECTION 11 VERTICAL

Z/BV -1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7053 .5543 .4990 .4374 .3449

.025 .1613 -.0135 -.1400 -.1523 -.2271

.050 .3350 .1825 -.1078 -.1367 -.1790

.150 .2763 .0372 .0395 .0375 .0307

.300 .1055 .0191 .0103 .0314 .0545

.520 -.0535 -.0795 .0333 .0776 .0495

.685 -.5058 -.1188 -.1850 .0096 .0776

.775 -.3492 -.1604 -.0460 .0209 .0539

.900 -.2203 -.0973 -.0108 -.0006 -.0901

.3505 -.3529 -.3510 -.3500 -.3501

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(XEBV14)

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TABULATED PRESSURE DATA - 06148 (AMES 11-073-1)

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THEORY

ALPHA = 3) = 3.907 BETA = 3) = 4.256 MACH = 1.2473 Q = 600.93 P = 551.82 R = 3.0265
SECTION: 1 VERTICAL DEPENDENT VARIABLE CP

X/C_V	χ/C_V
-6000	-4241
-5000	-4124
-4000	-3257
-3000	-2274
-2000	-1224
-1000	-5887
0	-6850
1000	-5401
2000	-5311
3000	-5898
4000	-6246
5000	-4978
6000	-1528
7000	-1351
8000	-0260
9000	-0176
10000	-0458
11000	-3356
12000	-0452
13000	-3663
14000	-1332
15000	-2777
16000	-0827
17000	-0957
18000	-1755
19000	-2500
20000	-1041
21000	-2394
22000	-0670
23000	-1532
24000	-1677
25000	-4196
26000	-2065
27000	-1848
28000	-2403
29000	-1335
30000	-3355
31000	-2500
32000	-1041
33000	-2394
34000	-0670
35000	-1532
36000	-1677
37000	-4196
38000	-2065
39000	-1848
40000	-2403
41000	-1335
42000	-3355
43000	-2500
44000	-1041
45000	-2394
46000	-0670
47000	-1532
48000	-1677
49000	-4196
50000	-2065
51000	-1848
52000	-2403
53000	-1335
54000	-3355
55000	-2500
56000	-1041
57000	-2394
58000	-0670
59000	-1532
60000	-1677
61000	-4196
62000	-2065
63000	-1848
64000	-2403
65000	-1335
66000	-3355
67000	-2500
68000	-1041
69000	-2394
70000	-0670
71000	-1532
72000	-1677
73000	-4196
74000	-2065
75000	-1848
76000	-2403
77000	-1335
78000	-3355
79000	-2500
80000	-1041
81000	-2394
82000	-0670
83000	-1532
84000	-1677
85000	-4196
86000	-2065
87000	-1848
88000	-2403
89000	-1335
90000	-3355
91000	-2500
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95000	-1532
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113000	-1335
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115000	-2500
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118000	-0670
119000	-1532
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132000	-1677
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135000	-1848
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139000	-2500
140000	-1041
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144000	-1677
145000	-4196
146000	-2065
147000	-1848
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149000	-1335
150000	-3355
151000	-2500
152000	-1041
153000	-2394
154000	-0670
155000	-1532
156000	-1677
157000	-4196
158000	-2065
159000	-1848
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163000	-2500
164000	-1041
165000	-2394
166000	-0670
167000	-1532
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170000	-2065
171000	-1848
172000	-2403
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174000	-3355
175000	-2500
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179000	-1532
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192000	-1677
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194000	-2065
195000	-1848
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199000	-2500
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201000	-2394
202000	-0670
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214000	-0670
215000	-1532
216000	-1677
217000	-4196
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220000	-2403
221000	-1335
222000	-3355
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224000	-1041
225000	-2394
226000	-0670
227000	-1532
228000	-1677
229000	-4196
230000	-2065
231000	-1848
232000	-2403
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235000	-2500
236000	-1041
237000	-2394
238000	-0670
239000	-1532
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246000	-3355
247000	-2500
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249000	-2394
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251000	-1532
252000	-1677
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255000	-1848
256000	-2403
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271000	-2500
272000	-1041
273000	-2394
274000	-0670
275000	-1532
276000	-1677
277000	-4196
278000	-2065
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281000	-1335
282000	-3355
283000	-2500
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285000	-2394
286000	-0670
287000	-1532
288000	-1677
289000	-4196
290000	-2065
291000	-1848
292000	-2403
293000	-1335
294000	-3355
295000	-2500
296000	-1041
297000	-2394
298000	-0670
299000	-1532
300000	-1677
301000	-4196
302000	-2065
303000	-1848
304000	-2403
305000	-1335
306000	-3355
307000	-2500
308000	-1041
309000	-2394
310000	-0670
311000	-1532
312000	-1677
313000	-4196
314000	-2065
315000	-1848
316000	-2403
317000	-1335
318000	-3355
319000	-2500
320000	-1041
321000	-2394
322000	-0670
323000	-1532
324000	-1677
325000	-4196
326000	-2065
327000	-1848
328000	-2403
329000	-1335
330000	-3355
331000	-2500
332000	-1041
333000	-2394
334000	-0670
335000	-1532
336000	-1677
337000	-4196
338000	-2065
339000	-1848
340000	-2403
341000	-1335
342000	-3355
343000	-2500
344000	-1041
345000	-2394
346000	-0670
347000	-1532
348000	-1677
349000	-4196
350000	-2065
351000	-1848
352000	-2403
353000	-1335
354000	-3355
355000	-2500
356000	-1041
357000	-2394
358000	-0670
359000	-1532
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364000	-2403
365000	-1335
366000	-3355
367000	-2500
368000	-1041
369000	-2394
370000	-0670
371000	-1532
372000	-1677
373000	-4196
374000	-2065
375000	-1848
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378000	-3355
379000	-2500
380000	-1041
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383000	-1532
384000	-1677
385000	-4196
386000	-2065
387000	-1848
388000	-2403
389000	-1335
390000	-3355
391000	-2500
392000	-1041
393000	-2394
394000	-0670
395000	-1532
396000	-1677
397000	-4196
398000	-2065
399000	-1848
400000	-2403
401000	-1335
402000	-3355
403000	-2500
404000	-1041
405000	-2394
406000	-0670
407000	-1532
408000	-1677
409000	-4196
410000	-2065
411000	-1848
412000	-2403
413000	-1335
414000	-3355
415000	-2500
416000	-1041
417000	-2394
418000	-0670
419000	-1532
420000	-1677
421000	-4196
422000	-2065
423000	-1848
424000	-2403
425000	-1335
426000	-3355
427000	-2500
428000	-1041
429000	-2394
430000	-0670
431000	-1532
432000	-1677
433000	-4196
434000	-2065
435000	-1848
436000	-2403
437000	-1335
438000	-3355
439000	-2500
440000	-1041
441000	-2394
442000	-0670
443000	-1532
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451000	-2500
452000	-1041
453000	-2394
454000	-0670
455000	-1532
456000	-1677
457000	-4196
458000	-2065
459000	-1848
460000	-2403
461000	-1335
462000	-3355
463000	-2500
464000	-1041
465000	-2394
466000	-0670
467000	-1532
468000	-1677
469000	-4196
470000	-2065
471000	-1848
472000	-2403
473000	-1335
474000	-3355
475000	-2500
476000	-1041
477000	-2394
478000	-0670
479000	-1532
480000	-1677
481000	-4196
482000	-2065
483000	-1848
484000	-2403
485000	-1335
486000	-3355
487000	-2500
488000	-1041
489000	-2394
490000	-0670
491000	-1532
492000	-1677
493000	-4196
494000	-2065
495000	-1848
496000	-2403
497000	-1335
498000	-3355
499000	-2500
500000	-1041

MACH = 1.41 *BETA* (1) = 7.853 *BETA* (11) = -3.870 *MACH* = 1.2469 *Q* = 600.88 *P* = 552.06 *RNL* = 3.0236
 SECTION 1 INVERTICAE
 DEPENDENT VARIABLE CP
 7.921 1500 3170 4500 6020 6970 8200 9500

DATE 1+ FEB 76

TABULATED PRESSURE DATA - DATA 140A/B/C/R ORB VERTICAL

REFERENCE DATA

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL							(XE8V15) (13 AUG 75)		
							PARAMETRIC DATA		
SECTION : 1) VERTICAL							RUDER = .000	SPOILER = .000	35.000
X/CY							BDFLAP = .000	L-ELVN = .000	.000
Z/RV							R-ELVN = .000	MACH = 1.100	
ALPHA : 1) = -4.072									
BETA : 1) = -3.851									
SECTION : 1) VERTICAL							DEPENDENT VARIABLE CP	RV/L = 3.1890	
X/CY							P = 709.32	RV/L = 3.1890	
Z/RV									
ALPHA : 1) = -4.070									
BETA : 1) = -189							Q = 599.97	P = 709.32	RV/L = 3.1890
SECTION : 1) VERTICAL							DEPENDENT VARIABLE CP		
X/CY									
Z/RV									

REFERENCE DATA

SECTION : 1) VERTICAL

DEFINITION OF X/CY

Z/RV

ALPHA : 1) = -4.072

BETA : 1) = -3.851

SECTION : 1) VERTICAL

DEFINITION OF X/CY

Z/RV

RUDER = .000

BDFLAP = .000

R-ELVN = .000

MACH = 1.100

P = 709.32

RV/L = 3.1890

DATE 1 → FEB 75

TRANSLATED PRESSURE DATA - OA14B (AMES 11-073)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

(XEB15)

A. EQU. 1 = 0.000
 SECTION 1, EQUATION
 2, B. = 1.000
 4. EQU. 2 = 0.000
 SECTION 1, EQUATION
 2, B. = 1.000

DEPENDENT VARIABLE CP

X/CP	5285	4848	4098	.3134
0.0	-1.3470	-1.5570	-1.6528	-1.6527
.25	-1.2544	-1.5572	-1.6057	-1.6365
.50	-1.1864	-1.3748	-1.3791	-1.5139
.75	-1.1328	-1.1167	-1.1519	-1.2800
1.0	-1.1333	-0.971	-0.955	.0044
1.25	-1.1237	-0.529	-0.5118	-0.4548
1.50	-1.1227	-0.071	-0.0193	-0.4483
1.75	-1.1227	-0.055	-0.0632	-0.2072
2.0	-1.1541	-0.055	-0.055	-0.3521

5. EQU. 1 = 0.000
 SECTION 1, EQUATION
 2, B. = 1.000

DEPENDENT VARIABLE CP

X/CP	5285	4848	4098	.3134
0.0	-1.3470	-1.5456	-1.567	-1.5334
.25	-1.2544	-1.5232	-1.2789	-1.2827
.50	-1.1864	-1.4768	-1.2767	-1.2749
.75	-1.1328	-1.1754	-1.2267	-1.1961
1.0	-1.1333	-1.1112	-1.2030	-1.1910
1.25	-1.1237	-1.0452	-1.1304	-1.0111
1.50	-1.1227	-1.0455	-1.2056	-1.1710
1.75	-1.1227	-1.0470	-1.1576	-1.3944
2.0	-1.1541	-0.0472	-0.0264	-0.4077

6. EQU. 1 = 0.000
 SECTION 1, EQUATION
 2, B. = 1.000

DEPENDENT VARIABLE CP

X/CP	5285	4848	4098	.3134
0.0	-1.3470	-1.5456	-1.567	-1.5334
.25	-1.2544	-1.5232	-1.2789	-1.2827
.50	-1.1864	-1.4768	-1.2767	-1.2749
.75	-1.1328	-1.1754	-1.2267	-1.1961
1.0	-1.1333	-1.1112	-1.2030	-1.1910
1.25	-1.1237	-1.0452	-1.1304	-1.0111
1.50	-1.1227	-1.0455	-1.2056	-1.1710
1.75	-1.1227	-1.0470	-1.1576	-1.3944
2.0	-1.1541	-0.0472	-0.0264	-0.4077

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL.

ALPHA (2) = -.007 BETA (3) = .4260 MACH = 1.099* Q = 599.94 P = 709.08 RN/L = 3.1892

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .300 -.6174 .4765 .136 .3365 .2516
.025 -.0713 -.3540 -.5814 -.7169 -.7699
.050 -.0467 -.2921 -.5837 -.6730 -.7446
.150 -.0751 -.1250 -.3639 -.3775 -.5039
.350 -.0254 -.1378 -.1662 -.1897 -.1988
.520 -.1937 -.2241 -.0815 -.0855 -.0589
.695 -.5157 -.2755 -.1197 -.0366 -.4400
.775 -.3776 -.2921 -.1790 -.1026 -.4262
.900 -.2123 -.2123 -.1850 -.1309 -.1086 -.2262 -.4019

ALPHA (3) = 3.931 BETA (1) = -3.870 MACH = 1.0960 Q = 598.54 P = 711.89 RN/L = 3.1893

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6004 .4272 .3710 .3650 .3437
.025 .3463 .2107 .1737 .1939 .2214
.050 .3738 .2297 .1680 .1863 .2176
.150 .2532 .1314 .1040 .1475 .1359
.300 .1038 .0410 .0373 .1475 .0526
.520 .0680 .0976 .0496 .0579 .0312
.685 .5531 .1805 .1862 .0665 .0986 .1343 .4257
.775 .3466 .1857 .0442 .0501 .0684 .0161 .4137
.900 .1378 .1378 .0478 .0041 .0243 .1769 .4047

ALPHA (3) = 3.932 BETA (2) = .189 MACH = 1.0960 Q = 598.54 P = 711.89 RN/L = 3.1893

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .020 .6682 .4937 .4407 .3891 .2971
.025 .1425 -.1169 -.2441 -.2686 -.3298
.050 .2812 .0959 -.1623 -.2110 -.2539
.150 .1929 .0057 -.0438 -.0529 -.0399
.300 .0145 .0546 -.0690 -.0050 -.0098
.520 -.1433 -.1692 -.0203 -.0217 -.0237
.685 -.5102 -.2364 -.1792 -.0605 .0106 .0867 -.4669
.775 -.3496 -.2669 -.1321 -.0567 -.0238 -.0376 .4233
.900 .1804 -.1804 -.1206 -.0724 -.0752 -.2219 -.4261ORIGINAL PAGE IS
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(XEBV15)

DATE 14 FEB 76

TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

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SECTION : 1	X/C	DEPENDENT VARIABLE CP			(XEV:5)
		BETA (3) = 3.935	MACH = 4.249	P = 598.54	
SECTION : 1	Z/BV	.1580	.3170	.4590	.6020 .6970 .8390 .9250

SECTION : 1	X/C	DEPENDENT VARIABLE CP			(XEV:5)
		BETA (1) = 7.884	MACH = 3.865	P = 599.29	
SECTION : 1	Z/BV	.1580	.3170	.4590	.6020 .6970 .8390 .9250

SECTION : 1	X/C	DEPENDENT VARIABLE CP			(XEV:5)
		BETA (2) = 7.355	MACH = 1.0986	P = 709.30	
SECTION : 1	Z/BV	.1580	.3170	.4590	.6020 .6970 .8390 .9250

SECTION : 1	X/C	DEPENDENT VARIABLE CP			(XEV:5)
		BETA (2) = 7.355	MACH = 1.0986	P = 709.30	
SECTION : 1	Z/BV	.1580	.3170	.4590	.6020 .6970 .8390 .9250

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DATE 14 FEB 76

TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

ALPHA (4) = 7.966 BETA (3) = 4.242 MACH = 1.0986 0 = 599.29 P = 709.30 RN/L = 3.1886
 SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.5952	.3748		.2612		.1662	.0620
.000	-.0457	-.3310		-.6169		-.7547	-.8652
.025	-.0124	-.3296		-.6429		-.7191	-.8333
.050	.0611	-.1992		-.4207		-.4300	-.4495
.100	-.1260	-.2331		-.2593		-.3260	-.2983
.150	-.3088	-.3306		-.2522		-.1691	-.1238
.200	-.4889	-.3562	-.1817	-.2422	-.1105	-.1001	-.4109
.250	-.3820	-.3536	-.2768	-.2114	-.1741	-.1670	-.3949
.300	-.2791	-.2596	-.2142	-.2154	-.2664	-.3577	

ALPHA (5) = 11.925 BETA (1) = -3.850 MACH = 1.0981 0 = 598.93 P = 709.53 RN/L = 3.1856
 SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6376	.3581		.2299		.1779	.1701
.000	.1889	.0871		.0537		.0818	.1246
.025	-.2782	-.1180		.0501		.0727	.1257
.050	.1422	.0111		-.0015		.0242	.0813
.100	-.0514	-.0772		-.0462		.0934	.0166
.150	-.1605	-.1589		-.0274		.0440	.0274
.200	-.5739	-.2079	-.2005	-.0319	-.0770	-.1122	-.3811
.250	-.3827	-.2378	-.1140	-.0195	-.0661	-.0323	-.3899
.300		-.2072	-.0773	-.0280	-.0029	-.1574	-.3886

ALPHA (5) = 11.933 BETA (2) = -1.77 MACH = 1.0981 0 = 598.93 P = 709.53 RN/L = 3.1856
 SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6205	.3912		.2906		.2052	.0939
.000	.0914	-.1870		-.3318		-.3481	-.4140
.025	.2291	.0120		-.2800		-.3524	-.3696
.050	.1240	-.0862		-.1613		-.1715	-.1725
.100	-.0767	-.1713		-.1863		-.1556	-.1133
.150	-.2524	-.2685	-.1445	-.0785	-.0240	-.1209	-.1128
.200	-.5244	-.3153	-.1775	-.1853	-.1174	-.1039	-.4706
.250	-.3917	-.3393	-.2320	-.1585	-.1364	-.2665	-.4283
.300		-.2600	-.1681	-.1283			

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(XE8V15)

DATE : 4 FEB 76

TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

(XE8V15)

ALPHA (5) = 11.928 BEITA (3) = 4.259 MACH = 1.0981 Q = 598.93 P = 709.53 RVL = 3.1856

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z / BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X / CY	.000	.6188	.3558	.1928	.0692	-.0496
.025	-.0235	-.4032	-.6393	-.7096	-.8212	
.050	-.0664	-.3479	-.6675	-.7196	-.7992	
.150	-.0568	-.2102	-.4575	-.4789	-.5812	
.300	-.1591	-.2705	-.3093	-.4271	-.3961	
.520	-.3474	-.3711	-.2917	-.2109	-.1812	
.685	-.5430	-.3835	-.1940	-.1543	-.1295	
.775	-.3875	-.3767	-.3132	-.2565	-.2285	
.900	-.2680	-.2680	-.2790	-.2513	-.2487	
				-.2734	-.3558	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

PAGE 6649

(XE8V16) (13 AUG 73)

REFERENCE DATA

SREF =	2691.0000	SQ.FT.	XMRP =	1076.6800	IN. X0
LREF =	474.8000	IN.	YMRP =	.0000	IN. Y0
BREF =	935.0600	IN.	ZMRP =	375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -4.023 BETA (1) = -3.852 MACH = .90217 0 = 601.77 P = 1056.2 RNL = 3.5811

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.4864	.3570	.3834		.4451	.3881	
.025	.3557	.2260	.2540		.3533	.2990	
.050	.3403	.2250	.2711		.3271	.2800	
.150	.1995	.1280	.1954		.2287	.1691	
.300	.0576	.0392	.1483		.1630	.0781	
.520	-.1509	-.0784	.1602		.0779	-.0007	
.685	-.2612	-.0186	.2239	.1327	.1167	.0659	-.1829
.775	-.1731	-.0184	.0554	.0736	.0256	.0976	-.1722
.900	-.0898	-.0898	-.0509	-.0789	-.1174	-.1882	-.1388
ALPHA (1) = -3.925 BETA (2) = 1.188 MACH = .90217 0 = 601.77 P = 1056.2 RNL = 3.5811							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.5553	.4519	.5162		.5223	.4426	
.025	.0322	-.2704	-.3067		.1921	-.3111	
.050	.1565	-.0131	-.0123		-.0026	-.0936	
.150	.0507	-.0720	-.0135		.0315	.0163	
.300	-.1011	-.1240	.0102		.0491	-.0213	
.520	-.2707	-.1791	.0763		.0093	-.0115	
.685	-.2991	-.0344	.2276	.0533	.0396	.0365	-.2268
.775	-.1898	-.0670	-.0125	-.0227	-.0329	-.1327	-.2247
.900	-.1233	-.1045	-.1029	-.1329	-.1629	-.2285	-.2007

PARAMETRIC DATA

RUDDER =	.000	SPDBRK =	35.000
BDFLAP =	.000	L-ELYN =	.000
R-ELVN =	.000	MACH =	.900

ORIGINAL PAGE
OF POOR QUALITY

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-07310A1481 - 140A/B/C/R ORB VERTICAL

(XE8V16)

ALPHA (1) = -3.933 BETA (3) = 4.265 MACH = .90217 Q = 601.77 P = 1056.2 RNL = 3.5811

SECTION : 1:VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.4713	.3365	.3141	.2334	.1787
.025	-.2108	-.6873	-.8861	-.4871	-.3823
.050	-.1218	-.6053	-.8733	-.4776	-.3693
.150	-.1428	-.3137	-.7546	-.4821	-.3417
.350	-.2412	-.3307	-.1353	-.4362	-.3234
.520	-.3886	-.4116	.0227	-.2177	-.3041
.685	-.3908	-.0784	-.2306	-.0023	-.1094
.775	-.1725	-.0597	-.0725	-.0691	-.2454
.900	-.1606	-.1625	-.1635	-.1524	-.2266

ALPHA (2) = -.017 BETA (1) = -3.871 MACH = .89983 Q = 599.69 P = 1058.1 RNL = 3.5748

SECTION : 1:VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.4308	.2657	.2913	.3709	.3210
.020	-.2688	-.1623	.2647	.3189	.2642
.025	-.2770	-.1595	.2320	.2899	.2449
.150	-.1382	-.0751	.1667	.1990	.1411
.300	-.0023	-.0011	.1320	.1346	.0457
.520	-.1803	-.0918	.1382	.070	.0225
.685	-.2464	-.0077	-.2142	.0789	.1503
.775	-.1798	-.0243	-.0387	.0171	.0023
.900	-.0935	-.3691	-.1047	-.1448	-.1200

ALPHA (2) = -.242 BETA (2) = .182 MACH = .89983 Q = 599.69 P = 1058.1 RNL = 3.5748

SECTION : 1:VERTICAL

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.5360	.3693	.4522	.4583	.3675
.025	-.0344	-.3363	-.3131	-.2018	-.2972
.050	-.0874	-.0382	-.0228	-.0292	-.0998
.150	-.5223	-.1512	-.0306	.0114	-.0005
.320	-.1668	-.1641	-.0021	.0209	-.0418
.520	-.2872	-.1903	-.0627	-.0099	-.0530
.625	-.2692	-.0371	-.2059	.0114	.0038
.775	-.1e+1	-.5e+2	-.0284	-.0444	-.0584
.900	-.1302	-.1272	-.1524	-.1856	-.2266

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

AMES 11-07310A1481 - 140A/B/C/R GRB VERTICAL

PAGE 6651

ALPHA (2) = .037 BETA (3) = 4.263 MACH = .89983 Q = 599.69 P = 1058.1 RNL = 3.5748
 SECTION 1; VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

Z/BV	X/CV	.000	.4146	.2696	.2247	.1554	.0852
	.025	-.2892	-.7318	-.9339	-.9911	-.3864	
	.050	-.2005	-.6538	-.9294	-.769	-.3716	
	.150	-.1875	-.3725	-.7953	-.4786	-.3382	
	.300	-.3060	-.3922	-.0878	-.4337	-.3220	
	.520	-.4569	-.3251	.0102	.2154	-.3149	
	.695	-.3107	-.0714	-.2185	-.0140	-.2433	
	.775	-.1970	-.0946	-.0793	-.0935	-.0460	
	.900	-.1567	-.1567	-.1796	-.1888	-.1665	

ALPHA (3) = 3.891 BETA (1) = -3.877 MACH = .90107 Q = 600.53 P = 1056.6 RNL = 3.5722
 SECTION 1; VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

Z/BV	X/CV	.000	.3799	.2284	.2107	.2996	.2414
	.025	.2259	.1142	.2548	.2221	.2984	.2455
	.050	.2162	.1225	.2221	.2221	.2721	.2221
	.150	.0854	.0470	.1583	.1225	.1870	.1185
	.300	-.0258	-.0208	.0981	.1225	.1217	.0653
	.520	-.1833	-.0381	-.0233	.1293	.0257	.0493
	.685	-.2494	-.0233	-.1809	.0985	.0558	.0015
	.775	-.1762	-.0018	-.0353	.0029	-.0177	-.1259
	.900	-.0675	-.0675	-.0722	-.1187	-.1576	-.1663

ALPHA (3) = 4.016 BETA (2) = 1.88 MACH = .90107 Q = 600.53 P = 1056.6 RNL = 3.5722
 SECTION 1; VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

Z/BV	X/CV	.000	.4793	.3245	.4004	.4095	.3093
	.025	-.0932	-.3608	-.2819	-.1996	-.2799	
	.050	.0537	-.1185	-.0363	-.0527	-.0875	
	.150	-.0622	-.1464	-.0308	-.0002	-.0170	
	.300	-.2025	-.1644	-.0099	-.0081	-.0565	
	.520	-.2931	-.1696	.0479	-.0284	-.0575	
	.685	-.2342	-.0295	-.1786	.0268	-.0201	
	.775	-.1715	-.0593	-.0298	-.0532	-.1552	
	.900	-.1232	-.1312	-.1671	-.1970	-.2118	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6622

ALPHA (3) = 4.017 BETA (3) = 4.257 MACH = .90107 Q = 600.53 P = 1056.6 RN/L = 3.5722
 SECTION 1 : VERTICAL
 Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .000 .3555 .2130 .1243 .0761 -.0129
 .025 -.3696 -.7563 -.9246 -.5003 -.4318
 .050 -.2245 -.7307 -.9257 -.4827 -.4130
 .150 -.2051 -.4470 -.7879 -.0387 -.4754
 .300 -.3622 -.4274 -.0387 -.4336 -.3758
 .520 -.4769 -.1505 -.0143 -.2117 -.3629
 .685 -.2651 -.0802 -.1920 -.0468 -.1329 -.2651
 .775 -.2055 -.1036 -.0965 -.1254 -.0715 -.1407
 .930 -.1521 -.1957 -.2264 -.1935 -.1674 -.2346
 -.1989

ALPHA (4) = 7.978 BETA (1) = -3.868 MACH = .90107 Q = 600.53 P = 1056.6 RN/L = 3.5741

SECTION 1 : VERTICAL
 Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .000 .3324 .663 .1521 .2173 -.1583
 .025 -.1621 .9922 .2260 .2647 -.2176
 .050 -.1733 .9953 .1888 .2414 -.1919
 .150 .0381 .631 .1593 .1580 .0890
 .300 -.3744 -.0541 .1078 .0971 -.0003
 .620 -.2127 -.0995 .1173 .0083 -.0692
 .685 -.2523 -.0255 .1822 .0883 .0419
 .775 -.1777 .209 .0295 .0048 -.0318
 .930 -.2550 -.0551 -.0741 -.1266 -.1504
 -.1661 -.1759 -.1551

ALPHA (4) = 7.924 BETA (2) = .191 MACH = .90107 Q = 600.53 P = 1056.6 RN/L = 3.5741
 SECTION 1 : VERTICAL
 Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .000 .4361 .2559 .3465 .3459 -.2364
 .025 -.1329 -.3572 -.2659 -.1814 -.2602
 .050 .0168 .1445 .0539 .0001 -.0783
 .150 -.0226 -.1778 .0404 -.0089 -.0321
 .300 -.2243 -.1820 .0177 -.0027 -.0714
 .620 -.2081 -.1812 .0428 -.0437 -.0779
 .685 -.2369 -.0318 .0134 -.0177 -.0446
 .775 -.1846 -.0255 .0884 -.0835 -.1615
 .930 -.1613 -.1517 -.1762 -.2089 -.1457
 -.1952 -.1305

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) - 140A/B/C/R ORB VERTICAL

(XEBV17)

ALPHA (1) = -4.373 BETA (3) = .201 MACH = .59694 Q = 595.28 P = 2386.4 RNL = 4.8216

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z_B7 .1580 .2170 .4590 .6020 .6970 .8390 .9250

X/CD .5024 .4563 .5185 .5185 .2757 -.1275 -.3565

.025 -.3169 -.2944 -.0105 -.0174 -.0048 -.0227

.050 .0986 .0105 .0285 -.0150 -.0039 -.0056

.150 -.0154 -.0592 -.0592 -.0592 -.0062 -.0056

.250 -.0853 -.0777 -.0510 -.0161 -.0181 -.0230

.350 -.12397 -.1077 -.0150 -.0105 -.0105 -.0389

.450 -.1571 -.11697 -.0330 -.0056 -.0056 -.1379

.550 -.2249 -.10994 -.0565 -.0653 -.0653 -.1075

.650 -.1711 -.1063 -.2522 -.2132 -.1718 -.1006

.750 -.1260 -.2132 -.2522 -.2132 -.1718 -.0819

A_PNL (1) = -4.386 BETA (4) = 4.270 MACH = .59694 Q = 595.28 P = 2386.4 RNL = 4.8216

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z_B7 .1580 .2170 .4590 .6020 .6970 .8390 .9250

X/CD .1772 -.1154 -.0944

.6563 -.4349 -.9973

.1563 -.4078 -.8850

.1563 -.3371 -.2699

.1563 -.1964 -.1746

.1563 -.1024 -.1291

.1563 -.0780 -.0995

.1563 -.1512 -.1547

.1563 -.2314 -.1535

.1563 -.1438 -.1438

A_PNL (1) = 9.352 BETA (5) = .59594 Q = 595.28 P = 2386.4 RNL = 4.8215

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z_B7 .1580 .2170 .4590 .6020 .6970 .8390 .9250

X/CD .2839 -.2839 -.4765 -.2771

.8559 -.7695 -.6762

.8559 -.7425 -.6376

.7144 -.7066 -.5376

.5821 -.6103 -.4528

.3521 -.3936 -.3380

.2757 -.3509 -.2797

.2234 -.1299 -.2956

.2234 -.2529 -.2517

.2234 -.2522 -.2522

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TABULATED PRESSURE DATA - DATA 14B (AMES 11-073-1)

PAGE 6557

AMES 11-07310A14B1 - 140A/B/C/R ORB VERTICAL

ALPHA (2) = .094		BETA (1) = -7.692		MACH = .5942	O = 594.20	P = 2386.3	RNL = 4.8159
SECTION: 1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	-.0353	-.3689		-.3242		-.0571	-.0697
.025	.4279	.2695		.4568		.4300	.3733
.050	-.3585	.3440		.4068		.3930	.3371
.150	.2419	.2208		.2925		.2769	.1981
.300	-.1136	.1087		.2172		.1863	.0881
.500	-.1283			.0949		.0714	.0227
.650	-.2320	.0393	-.1600	.1058	.0901	.0468	
.775	-.1752	-.0058	.0053	.0057	.0190	.0294	-.1893
.900	-.1414	-.1674	-.1674	-.1289	-.0855	-.0731	-.1147
							-.1185
ALPHA (2) = .094	BETA (2) = -3.858			MACH = .5942	O = 594.20	P = 2386.3	RNL = 4.8159
SECTION: 1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.3146	.1674		.1801		.3081	.2256
.025	.2718	.2079		.2863		.2769	.2458
.050	.2445	.1912		.2254		.2533	.2234
.150	.1252	.0556		.1593		.1602	.1146
.300	.0202	.0071		.0395		.1009	.0393
.500	-.1957	-.0380		.0255		.0299	-.0284
.695	-.2336	-.0187	-.1567	.0460	.0375	.0324	-.1484
.775	-.1729	-.0577	-.0414	-.0495	-.0304	-.0325	-.0846
.900	-.1822	-.2090	-.2090	-.1783	-.1230	-.0679	-.0674
ALPHA (2) = .071	BETA (3) = .198			MACH = .5942	O = 594.20	P = 2386.3	RNL = 4.8159
SECTION: 1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.4550	.4591		.4546		.4307	.3792
.025	-.3540	-.3020		-.2604		-.1299	-.3340
.050	.2514	-.0463		-.0330		-.0273	-.0370
.150	-.6179	-.0757		-.0216		-.0059	-.0097
.300	-.1038	-.1032		-.0128		.0076	-.0384
.500	-.2511	-.0559		-.0330		.0230	-.0529
.685	-.2306	-.0654	-.1534	-.0112	-.0194	-.0061	-.1256
.775	-.1710	-.0664	-.1048	-.0591	-.0827	-.0574	-.0507
.900	-.2102	-.2557	-.2213	-.1637	-.0931	-.0729	

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TABULATED PRESSURE DATA - DATA, (AMES 11-073-)

AMES 11 073(0A142) - 0A/B/C/R ORB VERTICAL

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ALPHA (3) = 4.010 BETA (2) = -3.86F DEF = VT VARIABLE CP (XEVIC)

SECTION (1) VERTICAL DEF = VT VARIABLE CP (XEVIC)

Z/BV .1580 .3170 .4590 .6020 .7. .3390 .9250

X/CV	.2701	.1243	.1159	.244	.1444
.025	.2335	.1778	.1257	.2518	.2218
.050	.2057	.1621	.2118	.2275	.1935
.150	.0861	.0675	.13	.1382	.0968
.300	-.0218	-.0151	.087	.0819	.0215
.520	-.1954	-.0449	.027	.0214	.0450
.685	-.2294	-.0165	.1530	.0179	.1691
.775	-.1697	-.0539	-.0494	.0196	.1026
.900	-.1744	-.2077	-.16	.0816	.0955

ALPHA (3) = -.008 BETA (3) = .197 MACH = .59616 O = 593.73 P = 2386.3 RNL = 4.8137

SECTION (1) VERTICAL DEF = VT VARIABLE CP (XEVIC)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.4251	.3607	.4023	.3743	.3134
.025	-.0719	-.3255	-.2576	-.1542	-.3191
.050	.0208	-.0728	-.0497	-.0409	-.0408
.150	-.0396	-.0359	-.0264	-.0262	-.0277
.300	-.1299	-.1189	-.0295	-.0101	-.0441
.520	-.2580	-.1175	-.0347	-.0357	-.0602
.685	-.2166	-.0657	-.1424	-.0202	-.0158
.775	-.1660	-.1025	-.1089	-.1108	-.1401
.900	-.2133	-.2574	-.2208	-.1651	-.0995

ALPHA (3) = 4.011 BETA (4) = 4.242 MACH = .59616 O = 593.73 P = 2386.3 RNL = 4.8137

SECTION (1) VERTICAL DEF = VT VARIABLE CP (XEVIC)

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.2435	.0575	.0302	.0351	.1083		
.025	-.3699	-.8295	-.6507	-.4289	-.9654		
.050	-.3376	-.4760	-.5701	-.4040	-.7081		
.150	-.2776	-.3321	-.4130	-.3618	-.3247		
.300	-.2465	-.2503	-.1634	-.2775	-.1703		
.520	-.2997	-.1770	-.1060	-.1053	-.1037		
.685	-.2113	-.1173	-.0837	-.0989	-.1073	-.2039	
.775	-.1856	-.1366	-.1646	-.1399	-.1097	-.1363	
.900	-.2367	-.3059	-.2545	-.2116	-.1099	-.1092	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL.

I(XEBV17)

Z/BV = 7.3170 BETA (5) = .8290 MACH = .59616 0 = 593.73 P = 2386.3 RN/L = 4.8137

SECTION 11 VERTICAL

Z/BV = 1.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

Z/BV	X/CY	BETA (5)	MACH	P	RN/L
.025	-1.1578	-.6090	-.5069	-.5478	-.4180
.050	-1.6655	-1.1882	-.8046	-.6706	-.5394
.150	-1.5724	-.9492	-.7891	-.6608	-.5149
.300	-1.8251	-.1037	-.7810	-.6528	-.4549
.500	-1.3995	-.4355	-.7259	-.6138	-.3964
.625	-1.3741	-.2552	-.3981	-.4264	-.3469
.750	-1.2611	-.1911	-.1597	-.2549	-.3959
.775	-1.2202	-.1911	-.2306	-.2613	-.2497
.800	-1.2766	-.3464	-.2003	-.2699	-.2486

ALPHA (3) = 4.014 DEPENDENT VARIABLE CP

Z/BV = 7.3170 BETA (1) = -7.891 MACH = .59650 0 = 593.32 P = 2386.1 RN/L = 4.8187

SECTION 11 VERTICAL

Z/BV = 1.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

Z/BV	X/CY	BETA (1)	MACH	P	RN/L
.025	-1.2236	-.4743	-.4908	-.2705	-.2504
.050	-1.3641	-.3302	-.2771	-.3498	-.2869
.150	-1.2115	-.2303	-.3424	-.3244	-.2617
.300	-1.1858	-.1797	-.2484	-.2271	-.1405
.500	-1.1710	-.0346	-.1925	-.1492	-.0499
.625	-1.1351	-.0370	-.0953	-.0339	-.0671
.750	-1.1145	-.0442	-.1465	-.0175	-.2399
.775	-1.1145	-.0179	-.0111	-.0059	-.0687
.800	-1.1145	-.1115	-.1294	-.0995	-.1979

ALPHA (3) = 9.13 DEPENDENT VARIABLE CP

Z/BV = 7.3170 BETA (2) = -3.864 MACH = .59650 0 = 593.32 P = 2385.1 RN/L = 4.8187

SECTION 11 VERTICAL

Z/BV	X/CY	BETA (2)	MACH	P	RN/L
.025	-1.1582	-.2710	.4530	.602C	.6970
.050	-1.2485	-.0714	.0524	.0557	.0643
.150	-1.1655	-.1558	.2455	.2392	.2005
.300	-1.1951	-.1415	.2041	.2112	.1722
.500	-1.0530	-.0535	.1255	.1243	.0778
.625	-1.0358	-.1037	.0923	.0735	.0055
.750	-1.0223	-.1035	.0224	.0078	.0687
.775	-1.0266	-.0532	.1260	.0220	-.2000
.800	-1.0266	-.0525	.1262	.0394	-.0613

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-C.310A148) -140A/B/C/R ORB VERTICAL

ALPHA (4) = 7.919 BETA (3) = .190 MACH = .59650 Q = 594.32 P = 2386.1 RN/L = 4.8187

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3974 .3233 .3521 .3273 .2541

.025 -.0794 -.3121 -.2367 -.1773 -.2993

.050 .0015 -.0871 -.0501 -.0250 -.0616

.150 -.0692 -.1053 -.0393 -.0295 -.0356

.300 -.1450 -.1260 -.0359 -.0153 -.0574

.520 -.2693 -.1063 -.0471 -.0371 -.0652

.685 -.2183 -.0619 -.0281 -.0385 -.1461

.775 -.1576 -.0937 -.1115 -.0108 -.0828 -.0944

.900 -.2072 -.2586 -.2173 -.1591 -.0930 -.0939

ALPHA (4) = 7.918 BETA (4) = 4.240 MACH = .59650 Q = 594.32 P = 2386.1 RN/L = 4.8187

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .2229 .0403 -.0157 -.1028 -.1818

.025 -.3700 -.6455 -.4129 -.5891 -.4348 -.9098

.050 -.3415 -.4429 -.5800 -.4052 -.5683

.150 -.2747 -.2578 -.4171 -.4022 -.3980

.300 -.2572 -.2558 -.1496 -.2789 -.4046

.520 -.3066 -.1650 -.1087 -.1001 -.1197

.685 -.1944 -.1143 -.1380 -.1013 -.1028 -.1991

.775 -.1790 -.1254 -.1686 -.1595 -.1496 -.1349

.900 -.2397 -.2397 -.3036 -.2435 -.2108 -.1136 -.1314

ALPHA (4) = 7.914 BETA (5) = 8.294 MACH = .59650 Q = 594.32 P = 2386.1 RN/L = 4.8187

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 -.1817 -.6425 -.5708 -.5646 -.4713

.025 -.6776 -.11315 -.8004 -.6006 -.4803

.050 -.7059 -.9511 -.7974 -.6077 -.4504

.150 -.8775 -.10133 -.8074 -.6006 -.4033

.300 -.3657 -.4021 -.7664 -.5748 -.3637

.520 -.3381 -.2497 -.3362 -.4379 -.3362

.685 -.2323 -.1878 -.1574 -.2979 -.4162 -.3026

.775 -.2221 -.1932 -.2205 -.2047 -.2437 -.3496 -.2801

.900 -.2251 -.2651 -.3022 -.2404 -.2482 -.2711 -.2590

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-07310A14B) -140A/B/C/R ORB VERTICAL

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ALPHA (E) = 11.926	BETA (1) = -7.855	MACH = .59628	Q = 593.97	P = 2386.5	RNL = 4.8170	IXE8V171
<u>SECTION 1 VERTICAL</u>						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390
X/CV	-1.1418	-5655	-5822	-3728	-3691	
C25	.2659	.3057	.3286	.313b	.2377	
C50	.2271	.2692	.3159	.2979	.2230	
.150	.1041	.1623	.2306	.2081	.1184	
.150	.1258	.1598	.1731	.1366	.0279	
.150	.1256	.1592	.0942	.0644	.0763	
.165	.1256	.1592	.1413	.0914	.0028	
.175	.1814	.2230	.0239	.0052	.2361	
.900	.0310	.1215	.0959	.1014	.1967	
					.1249	.1920
ALPHA (5) = 11.949	BETA (2) = -3.840	MACH = .59628	Q = 593.97	P = 2386.5	RNL = 4.8170	
<u>SECTION 1 VERTICAL</u>						
Z/BV	.1560	.3170	.4590	.6020	.6970	.8390
X/CV	.2659	.3144	.0100	.0720	.0090	
C25	.1762	.1551	.2260	.2175	.1748	
C50	.1518	.2377	.1841	.1950	.1508	
.150	.1636	.1636	.1132	.1123	.0563	
.150	.1636	.1636	.1594	.0609	.0073	
.150	.1636	.1636	.1337	.0151	.0774	
.150	.1636	.1636	.1322	.0343	.1989	
.150	.1636	.1636	.0391	.0436	.0653	
.150	.1636	.1636	.1871	.1872	.1320	
				.1187	.0394	.1199
ALPHA (5) = 11.949	BETA (2) = .189	MACH = .59628	Q = 593.97	P = 2386.5	RNL = 4.8170	
<u>SECTION 1 C2</u>						
Z/BV	.1530	.3170	.4520	.6020	.6970	.8390
X/CV	.2659	.2957	.2957	.2106	.2791	.2030
C25	.1541	.1617	.2662	.1850	.2761	
C50	.1541	.1617	.0571	.0282	.0679	
.150	.1541	.1541	.1457	.0355	.0451	
.150	.1541	.1541	.1395	.0779	.0653	
.150	.1541	.1541	.1353	.0436	.0770	
.150	.1541	.1541	.1322	.0481	.1542	
.150	.1541	.1541	.1141	.0948	.0979	
				.1627	.0953	.1003

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TABULATED PRESSURE DATA - OR14B (AMES 11-073-1)

AMES 11-073(OR14B) -140A/B/C/R ORB VERTICAL
 $\alpha_{\text{PHA}} (5) = 11.952 \quad \beta_{\text{TA}} (4) = 4.250 \quad \text{MACH} = .59328 \quad 0 = 593.97 \quad P = 2386.5 \quad RN/L = 4.8170$

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	DEPENDENT VARIABLE CP	(XE8V17)
X/CV	.000	.2563	.0032	-.0940	-.1778	-.2739			
	.025	-.3603	-.8239	-.6581	-.4435	-.8317			
	.050	-.3222	-.4659	-.5945	-.4197	-.5142			
	.150	-.2750	-.3893	-.4076	-.4485	-.4648			
	.300	-.2729	-.2588	-.1624	-.3067	-.1547			
	.520	-.3197	-.1731	-.1209	-.0978	-.1635			
	.685	-.1867	-.1196	-.1324	-.1038	-.0931	-.2111		
	.775	-.1805	-.1422	-.1825	-.1857	-.1688	-.1135	-.1642	
	.900	-.2431	-.3163	-.2614	-.2113	-.1250	-.1611		
ALPHA (5) = 11.942									
SECTION (1) VERTICAL									
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	DEPENDENT VARIABLE CP	(XE8V17)
X/CV	.000	-.2216	-.6961	-.6701	-.6154	-.5333			
	.025	-.7816	-.1174	-.8167	-.5922	-.4517			
	.050	-.8069	-.9657	-.8368	-.5884	-.4368			
	.150	-.5207	-.10535	-.8669	-.5849	-.3870			
	.300	-.4815	-.4464	-.8227	-.5742	-.3669			
	.520	-.4537	-.2491	-.3451	-.4665	-.3417			
	.685	-.3390	-.2028	-.1582	-.3238	-.4391	-.3104		
	.775	-.2505	-.2191	-.2229	-.1846	-.2649	-.3871	-.2869	
	.900	-.2832	-.3034	-.2419	-.2159	-.2983	-.2625		

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

REFERENCE DATA

	SREF	LREF	BREF	SCALE	XMRP	YMRP	ZMRP	PARAMETRIC DATA
	2690.0000	47+.9000	935.0583	.C303	:076.6800	N. X0	375.0000	RUDER = .000 SPDBRK = -11.700 L-ELVN = .000 MACH = 1.400
	IN.	IN.	IN.	IN.	:0000	N. Y0	IN.	
ALPHA (1) =	-4.050				BETA (1) =	-3.854	MACH = 1.3965	
SECTION (1) VERTICAL							0 = 599.95	P = 439.47
Z:BY	.1580	.3170	.4590		.6020	.6970	.8390	RNL = 2.9144
X:CV								
1.000	.7833	.6713	.6465		.4722	.4651	.6565	.6364
.025	.5119	.5274	.4722		.5252	.4651	.4770	.4697
.050	.6259	.5252	.4651		.3926	.3324	.4706	.4671
.075	.5317	.4261	.3926		.1855	.1872	.4033	.3781
.100	.3970	.3357	.3324		.2872	.2848	.3512	.3047
.125	.2239	.2072	.1855		.2936	.2955	.2490	.1340
.150	.2687	.2359	.1872		.2936	.2955	.3322	.3694
.175	.3363	.3215	.2848		.2936	.2955	.3073	.3587
.200	.3203	.3215	.2848		.2936	.2955	.3253	.3494
ALPHA (1) =	-4.052				BETA (2) =	-2.2774		
SECTION (1) VERTICAL								
Z:BY	.1580	.3170	.4590		.6020	.6970	.8390	.9250
X:CV								
1.000	.7851	.7621	.7097		.6535	.6165	.6588	.5989
.025	.6282	.5252	.4651		.5545	.4157	.0229	-.0552
.050	.5570	.4261	.3926		.2252	.1915	.0397	.0005
.075	.5510	.3357	.3324		.2105	.1655	.2252	.2248
.100	.3794	.2072	.1855		.1915	.1655	.2105	.2017
.125	.3794	.2359	.1872		.1763	.1763	.1919	.1047
.150	.3763	.3215	.2848		.1763	.1763	.1763	
.175	.3763	.3215	.2848		.1763	.1763	.1763	
.200	.3763	.3215	.2848		.1763	.1763	.1763	
ALPHA (1) =	-4.052				BETA (2) =	-3.3474		
SECTION (1) VERTICAL								
Z:BY	.1580	.3170	.4590		.6020	.6970	.8390	.9250
X:CV								
1.000	.7851	.7621	.7097		.6535	.6165	.6588	.5989
.025	.6282	.5252	.4651		.5545	.4157	.0229	-.0552
.050	.5570	.4261	.3926		.2252	.1915	.0397	.0005
.075	.5510	.3357	.3324		.2105	.1655	.2252	.2248
.100	.3794	.2072	.1855		.1915	.1655	.2105	.2017
.125	.3794	.2359	.1872		.1763	.1763	.1919	.1047
.150	.3763	.3215	.2848		.1763	.1763	.1763	
.175	.3763	.3215	.2848		.1763	.1763	.1763	
.200	.3763	.3215	.2848		.1763	.1763	.1763	

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

(XEP/18)

ALPHA (1) = -4.051 BETA (3) = 4.285 MACH = 1.3965 Q = 599.95 P = 439.47 RNL = 2.9144 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z(B)	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
	.7661	.6699	.6183	.5468	.4646		
	.025	.0943	-.0683	-.2793	-.4639	-.5263	
	.050	.1140	-.0804	-.3100	-.4471	-.4841	
	.150	.2138	.0354	-.0657	-.3278	-.3902	
	.300	.2140	.0864	-.0367	.0151	-.1585	
	.520	.0513	.0139	.0034	.0376	.0446	
	.655	-.3712	-.4195	-.1591	-.4247	-.4028	
	.775	-.3650	-.4089	-.3888	-.3796	-.3811	
	.900	-.4039	-.4039	-.3978	-.3955	-.3738	

ALPHA (2) = -.030 BETA (1) = -3.874 MACH = 1.3950 Q = 599.63 P = 440.18 RNL = 2.9101 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z(B)	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
	.7151	.5987	.5710	.5551	.5464		
	.000	.5210	.4493	.3935	.3987	.3969	
	.325	.5447	.4455	.3885	.3942	.3930	
	.050	.4485	.3477	.3191	.3305	.3116	
	.150	.3141	.2586	.2599	.2868	.2404	
	.300	.1549	.1766	.1330	.1974	.0348	
	.585	-.3311	-.3624	-.1542	-.4081	-.3509	
	.775	-.3368	-.3520	-.3154	-.3171	-.3314	
	.900	-.3441	-.3240	-.3078	-.3078	-.3159	

ALPHA (2) = -.025 BETA (2) = .186 MACH = 1.3950 Q = 599.63 P = 440.18 RNL = 2.9101 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z(B)	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
	.7575	.6594	.6234	.5660	.4781		
	.000	.2146	.1037	-.0112	-.0160	-.0894	
	.025	.3295	.2935	.0241	-.0049	-.0394	
	.150	.3740	.2168	.1685	.1702	.1574	
	.300	.2272	.1500	.1396	.1529	.1353	
	.520	.0736	.0518	.0609	.1292	.0608	
	.655	-.3729	-.3346	-.1510	-.4322	-.3542	
	.775	-.3437	-.7341	-.3708	-.3715	-.3727	
	.900	-.2557	-.3748	-.3698	-.3698	-.3729	

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TABULATED PRESSURE DATA - DAIRY (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

ALPHA (2) = -.030 BETA (3) = .4265 MACH = 1.3950 Q = 599.63 P = 440.18 PN/L = 2.9101

SECTION 1: VERTICAL

Z/B: .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

	.6919	.5995	.5418	.4638	.3700
A/CD	-.0258	-.1339	-.3045	-.4719	-.5352
C/CD	.0479	-.1347	-.3416	-.4595	-.4935
B/CD	.1463	-.0216	-.1018	-.3488	-.3662
Z/CD	.1520	.0511	-.0731	-.0265	-.1477
E/CD	-.0013	-.0350	-.0369	-.0053	-.0053
F/CD	-.1523	-.4774	-.4507	-.4218	-.3795
G/CD	-.2587	-.4617	-.4142	-.4077	-.3931
H/CD	-.4242	-.4275	-.4139	-.4101	-.3929

ALPHA (3) = 3.915 BETA (1) = -3.877 MACH = 1.3940 Q = 599.41 P = 440.65 PN/L = 2.9155

SECTION 1: VERTICAL

Z/BY: .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

	.6918	.5995	.4975	.4623	.4534
A/CD	-.0178	.5259	.3122	.3210	.3099
C/CD	.0261	.3676	.3093	.3124	.3146
B/CD	.1420	.5755	.2490	.2587	.2455
Z/CD	.2134	.2714	.1915	.2181	.1817
E/CD	-.1562	.1925	.0791	.1425	.0477
F/CD	.0536	.1834	.1555	.3470	.4008
G/CD	-.1520	.1838	.4297	.3701	.3924
H/CD	-.1515	.1807	.3430	.3553	.3537
I/CD	-.1510	.1765	.3530	.3662	.3877

ALPHA (3) = 3.922 BETA (2) = .165 MACH = 1.3940 Q = 599.41 P = 440.65 PN/L = 2.9155

SECTION 1: VERTICAL

Z/B: .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

	.6918	.5995	.5353	.4702	.3950
A/CD	-.0169	.5258	.3127	.3217	.3097
C/CD	.0260	.3678	.3094	.3125	.3147
B/CD	.1420	.5755	.2492	.2583	.2456
Z/CD	.2135	.2715	.1916	.2182	.1818
E/CD	-.1563	.1926	.0792	.1426	.0478
F/CD	.0537	.1835	.1556	.3473	.4009
G/CD	-.1516	.1839	.4298	.3703	.3925
H/CD	-.1511	.1766	.3431	.3554	.3538
I/CD	-.1506	.1767	.3531	.3663	.3878

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TABULATED PRESSURE DATA - DAIRY (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

$$\alpha_{\text{DFA}} + \beta_1 = 2.923 \quad \beta_{\text{TA}} + \beta_2 = 4.255 \quad \text{MACH} = 1.3940 \quad Q = 599.41 \quad P = 440.65 \quad RN/L = 2.9155$$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

X/CV	Z/BV	BETA + 3)	BETA + 3)	MACH	Q	P	RN/L
.000	.1590	.3170	.4590	.6020	.6970	.8290	.9250
.025							
.050							
.150							
.350							
.520							
.655							
.775							
.900							

$$\alpha_{\text{DFA}} + \beta_1 = 7.792 \quad \beta_{\text{TA}} + \beta_2 = -3.867 \quad \text{MACH} = 1.3956 \quad Q = 599.84 \quad P = 439.94 \quad RN/L = 2.9129$$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

X/CV	Z/BV	BETA + 3)	BETA + 3)	MACH	Q	P	RN/L
.000	.1590	.3170	.4590	.6020	.6970	.8390	.9250
.025							
.050							
.150							
.350							
.520							
.655							
.775							
.900							

$$\alpha_{\text{DFA}} + \beta_1 = 7.79; \quad \beta_{\text{TA}} + \beta_2 = .182 \quad \text{MACH} = 1.3956 \quad Q = 599.84 \quad P = 439.94 \quad RN/L = 2.9129$$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

X/CV	Z/BV	BETA + 3)	BETA + 3)	MACH	Q	P	RN/L
.000	.1590	.3170	.4590	.6020	.6970	.8390	.9250
.025							
.050							
.150							
.350							
.520							
.655							
.775							
.900							

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

ALPHA (4) = 7.319 BETA (3) = 4.252 MACH = 1.3956 Q = 599.84 P = 439.94 RNL = 2.9129

SECTION 1 INERTIAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .5577 .5033 .3845 .2935 .2459

.025 .0985 .1480 .3526 .4646 .5447

.050 .1443 .1248 .3789 .4703 .5011

.150 .2405 .0022 .1700 .3131 .3945

.250 .0564 .1552 .1127 .1137 .1115

.450 -.1134 .1265 .1175 .0852 .0865

.650 -.2591 .4861 -.1677 .4366 .4612

.750 -.2514 .4651 -.4633 .4449 .4314

.950 -.2514 .2344 -.4722 .4606 .4335

A-PHA (5) = 11.807 BETA (1) = -3.848 MACH = 1.3965 Q = 599.65 P = 439.24 RNL = 2.9163

SECTION 1 INERTIAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6456 .4555 .3601 .3031 .2912

.025 .2518 .2652 .1857 .1893 .1736

.050 .1551 .2755 .1911 .1826 .1840

.150 .2542 .1659 .1252 .1344 .1283

.450 .1553 .1553 .1550 .1016 .0797

.650 -.1525 .1525 -.0046 .0418 .0282

.750 -.4983 .1443 -.1764 -.3777 .3857

.950 -.5718 .1443 -.3695 -.3853 .4259

.050 -.2514 .1265 -.3931 -.3582 .4166

.250 -.2514 .1265 -.3931 -.3582 .4152

A-PHA (5) = 11.812 BETA (2) = .187 MACH = 1.3965 Q = 599.65 P = 439.24 RNL = 2.9163

SECTION 1 INERTIAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6532 .722 .3757 .3054 .2476

.025 .1514 .0035 .1123 .1282 .1819

.050 .1515 .1515 .1171 .1425 .1426

.150 .2516 .1516 .1097 .0024 .0063

.450 .1517 .1517 .1095 .0140 .0263

.650 .1518 .1518 .1085 .0240 .0797

.750 .1519 .1519 .1086 .0240 .0797

.950 .1520 .1520 .1075 .0240 .0797

.050 -.2515 .1515 -.1826 .4182 .4385

.250 -.2515 .1515 -.1826 .4182 .4429

.450 -.2515 .1515 -.1826 .4182 .4432

.650 -.2515 .1515 -.1826 .4182 .4456

.750 -.2515 .1515 -.1826 .4182 .4456

.950 -.2515 .1515 -.1826 .4182 .4456

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

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ALPHA (5) = 11.810 BETA (3) = 4.268 MACH = 1.3365 Q = 599.65 P = 439.24 RNL = 2.9163
 SECTION (1) VERTICAL

Z' BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.6229	.4710	.3125	.2171	.1774
.025	-.1044	-.1533	-.3619	-.4604	-.5358
.050	-.1568	-.1353	-.3926	-.4635	-.5086
.150	-.2232	-.0735	-.1971	-.3244	-.3771
.250	-.0461	-.0767	-.1486	-.1627	-.1682
.500	-.1426	-.1656	-.1481	-.1458	-.1282
.550	-.3879	-.4949	-.1831	-.5032	-.4616
.750	-.3559	-.4643	-.4744	-.4701	-.4632
.920	-.3992	-.4861	-.4751	-.4725	-.4579

ALPHA (6) = 15.905 BETA (1) = -3.833 MACH = 1.3951 Q = 599.73 P = 440.18 RNL = 2.9164
 SECTION (1) VERTICAL

Z' BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.7672	.5127	.3328	.2401	.2276
.025	-.2616	-.1301	-.1449	-.1432	-.1263
.050	-.5470	-.2611	-.1451	-.1351	-.1352
.150	-.2355	-.1153	-.0879	-.0867	-.0842
.250	-.0561	-.0172	-.0353	-.0548	-.0398
.500	-.1622	-.1674	-.0071	-.0071	-.0541
.550	-.4983	-.4487	-.2027	-.3868	-.4002
.750	-.3519	-.3571	-.4069	-.3992	-.4055
.920	-.4592	-.4592	-.4007	-.3837	-.3996

ALPHA (6) = 15.920 BETA (2) = -154 MACH = 1.3951 Q = 599.73 P = 440.18 RNL = 2.9164
 SECTION (1) VERTICAL

X/CY	.8335	.6232	.3315	.2409	.1865
.025	-.1552	-.0583	-.1442	-.1611	-.2069
.050	-.2955	-.1444	-.1459	-.1725	-.1623
.150	-.2443	-.0233	-.0239	-.0327	-.0422
.250	.0730	-.0252	-.0527	-.0522	-.0618
.500	-.1171	-.1155	-.1174	-.0629	-.1118
.550	-.4365	-.4475	-.2030	-.4327	-.4549
.750	-.3116	-.3118	-.4549	-.4491	-.4556
.920	-.4578	-.4578	-.4493	-.4460	-.4609

IXE8V1B)

DEPENDENT VARIABLE CP

DEPENDENT VARIABLE CP

DEPENDENT VARIABLE CP

DEPENDENT VARIABLE CP

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TABLED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-07310A148) -140A/B/C/R ORB VERTICAL
EQUATION OF MOTION
SECTION 1: INERTIAL
Z G. .1560 .3172 .+590 .6020 .6970 .8390 .9250
X-C. .325 .7617 .5285 .2865 .1559 .1282
Y-C. .1196 .1548 .3526 .4609 .5142
.2553 .1219 .3935 .4671 .5135
.2615 .0073 .2106 .2809 .3694
.0715 .0760 .1628 .1909 .2217
.1415 .11813 .1762 .1812 .1634
.1415 .11813 .15135 .4474 .4601 .4642
.1415 .11813 .2038 -.4720 .4666 .4554
.1415 .11813 .4794 .4825 .4675 .4621

BETA : 31 = 4.299 MACH = 1.3951 Q = 599.73 P = 444.18 R/L = 2.9184
X-EQUATION

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TABULATED PRESSURE DATA - OA:4B (AMES 11-073-1)

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AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

(XEBV19) : 13 AUG 75

REFERENCE DATA

REF#	=	2030	SCD	SQ.FT.	XMPB	=	1076.5800	IN. X0
REF#	=	2030	140A	140B	140C	=	0.000	IN. Y0
REF#	=	2030	140A	140B	140C	=	375.0000	IN. Z0
SCD#	=	1200						

ALPHA (1) = -4.0+8 BETA (1) = -3.8+8 MACH = 1.2+78 0 = 600.12 P = 550.64 RNL = 3.0180

SECTION 1: VERTICAL

Z/CY		.1580	.3170	.4590	.6020	.6970	.8390	.9250
		.7639	.52+9	.5079	.6165	.5887		
		.5354	.4153	.4195	.4247	.3973		
		.5397	.4516	.4095	.4247	.3973		
		.4541	.3628	.3407	.4155	.3987		
		.3266	.2764	.2743	.3398	.3090		
		.1651	.1312	.0943	.2762	.2247		
		.1325	.4642	.4432	.4447	.4259		
		.2322	.4289	.4116	.4209	.4955		
		.3+03	.4047	.3991	.4233	.4653		
					.4880	.5626		

ALPHA (1) = -3.97+ BETA (1) = -1.192 MACH = 1.2+78 0 = 600.12 P = 550.64 RNL = 3.0180

SECTION 1: VERTICAL

Z/CY		.1580	.3170	.4590	.6020	.6970	.8390	.9250
		.8122	.6924	.6637	.6295	.5658		
		.6810	.6862	.6302	.6013	.5057		
		.4376	.4346	.4294	.4188	.3683		
		.3791	.2140	.1665	.1681	.1720		
		.2215	.1452	.1444	.1589	.1343		
		.1618	.1238	.0344	.0776	.0080		
		.1167	.0523	.1727	.1554	.1532		
		.7646	.4632	.4844	.4875	.5114		
		.4632	.4593	.4676	.4854	.4340		
		.4631				.4769		

PARAMETRIC DATA

RUDER = 0.010

BDLAP = -11.700

SPDRX = 0.000

L-ELVN = 1.000

MACH = 1.250

R-ELVN =

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-07310(A14B) - 140A/B/C/R ORB VERTICAL

(XEBV19)

ALPHA (1) = -3.984 BETA (3) = 4.283 MACH = 1.2478 O = 600.12 P = 550.64 RN/L = 3.0180

SECTION 1: VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7445 .6178 .5744 .4973 .4280

.025 .9714 -.1589 -.3595 -.5977 -.6824

.050 .1015 -.1594 -.3984 -.5939 -.6033

.150 .2007 .0025 -.1195 -.3692 -.4963

.320 .1413 .0229 -.0990 -.0573 -.0685

.520 -.0235 -.0498 -.0734 -.0732 -.0470

.685 -.4627 -.5431 -.1776 -.5489 -.5141

.775 -.5247 -.5214 -.5229 -.5309 -.5250

.920 -.3853 -.4433 -.5229 -.5214 -.5070

.950 -.5214 -.5179 -.5013 -.5164 -.5013

ALPHA (2) = -.251 BETA (1) = -3.861 MACH = 1.2471 O = 599.71 P = 550.87 RN/L = 3.0179

SECTION 1: VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 5955 .5515 .5209 .5252 .5042

.025 .5113 .3853 .3340 .3447 .3346

.050 .5264 .3907 .3273 .3380 .3317

.150 .4139 .2892 .2611 .2703 .2447

.250 .2591 .2029 .2000 .2169 .1692

.420 .0828 .0704 .0473 .1007 -.0160

.685 -.1283 -.4969 -.1613 -.5515 -.5375

.775 -.3479 -.4559 -.4395 -.4446 -.4773

.920 -.3714 -.4407 -.4316 -.4456 -.4874

.950 -.4129 -.4129 -.4129 -.4129 -.5112

ALPHA (2) = -.007 BETA (2) = .182 MACH = 1.2471 O = 599.71 P = 550.87 RN/L = 3.0179

SECTION 1: VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 7533 .6213 .5921 .5381 .4572

.025 .4214 .3287 .2805 -.1022 -.1718

.050 .3133 .2326 -.0371 -.0903 -.1158

.150 .2573 .1515 -.1024 -.1003 -.1037

.320 .1543 .0639 .0754 -.0898 -.0739

.685 -.1264 -.0167 -.0183 -.0404 -.0390

.775 -.1492 -.1531 -.1535 -.5034 -.5261

.920 -.2116 -.1521 -.5087 -.5022 -.5092

.950 -.4129 -.5033 -.5017 -.5100 -.5198

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

ALPHA (2) = -.013 BETA (3) = .4263 MACH = 1.2471 0 = 599.71 P = 550.87 RNL = 3.0179

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .030 .6780 .5521 .4974 .4163 .3279

.025 -.0247 -.1933 -.3874 -.5988 -.6891

.050 -.0120 -.2018 -.4389 -.6073 -.6172

.150 .1357 -.0652 -.1720 -.3416 -.4924

.300 .0930 -.0152 -.1419 -.1103 -.0958

.520 -.0737 -.1045 -.1132 -.1163 -.0903

.685 -.4540 -.5736 -.1586 -.5857 -.5475 -.5203

.775 -.3771 -.5506 -.5480 -.5274 -.5435 -.5304

.900 -.4299 -.5563 -.5480 -.5425 -.5308 -.5267

ALPHA (3) = 3.859 BETA (1) = -3.873 MACH = 1.2484 0 = 600.53 P = 550.41 RNL = 3.0214

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6249 .4912 .4444 .4261 .4138

.025 .3863 .3098 .2548 .2671 .2643

.050 .4173 .3155 .2520 .2600 .2621

.150 .3252 .2243 .1896 .1995 .1797

.300 .1925 .1340 .1314 .1516 .1054

.520 .0319 .0132 -.0057 .0536 -.0563

.685 .4548 -.5210 -.1716 -.4844 -.5173 -.5532

.775 .3498 -.5018 -.4650 -.4711 -.4920 -.4908

.900 .4051 -.4729 -.4552 -.4692 -.5074 -.5339

ALPHA (3) = 3.906 BETA (2) = .178 MACH = 1.2484 0 = 600.53 P = 550.41 RNL = 3.0214

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7096 .5556 .4992 .4399 .3507

.025 .1708 -.0042 -.1235 -.1358 -.2073

.050 .3423 .1875 -.0894 -.1306 -.1580

.150 .2797 .1014 .0173 .0427 .0439

.300 .1162 .0233 .0173 .0327 .0186

.520 .0492 -.0709 -.0647 .0040 -.0804

.685 .4778 -.5479 -.1709 -.5148 -.5464 -.5565

.775 .3570 -.5410 -.5248 -.5226 -.5312 -.5258

.900 .4148 -.5272 -.5226 -.5269 -.5370 -.5365

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL (XEBV19)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-07310A148 - 140A/B/C/R ORB VERTICAL
(XEBV19)

ALPHA (4) = 7.972 BETA (3) = 4.253 MACH = 1.2474 0 = 600.07 P = 550.87 RNL = 3.0223

SECTION 1 (VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6304	.4591	.3380	.2441	.1520
	.025	.0765	.2364	-.4493	-.5879	-.6688
	.050	.1219	-.2182	-.4924	-.5815	-.6381
	.150	.1641	-.0802	-.2522	-.3920	-.4598
	.300	.0237	-.1207	-.1847	-.1963	-.1930
	.520	.1910	-.2194	-.1932	-.1662	-.1861
	.695	.4623	-.6224	-.6438	-.5980	-.5775
	.775	.3843	-.5085	-.5855	-.5794	-.5673
	.900	.4144	-.4144	-.5730	-.5924	-.5870

ALPHA (5) = 11.905 BETA (1) = -3.844 MACH = 1.2483 0 = 600.41 P = 550.41 RNL = 3.0228

SECTION 1 (VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6546	.4299	.3130	.2550	.2439
	.025	.2801	.1939	.1280	.1443	.1369
	.050	.3562	.2140	.1287	.1365	.1426
	.150	.2197	.1116	.0754	.0851	.0772
	.300	.0445	.0090	.0250	.0520	.0121
	.520	.0733	-.0707	-.0779	-.0373	-.1275
	.775	.4829	-.5352	-.1861	-.5125	-.5357
	.900	.3829	-.5333	-.4889	-.5170	-.5286

ALPHA (5) = 11.915 BETA (2) = .187 MACH = 1.2483

SECTION 1 (VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.5557	.4471	.3458	.2655	.1882
	.025	.1681	-.0641	-.1991	-.2176	-.2708
	.050	.3040	.1149	-.1858	-.2209	-.2233
	.150	.2277	.0132	-.0546	-.0627	-.0642
	.300	.0234	-.0710	-.0842	-.0741	-.0852
	.520	.1445	-.1592	-.1522	-.0937	-.1612
	.685	.4948	-.5851	-.1911	-.6249	-.5804
	.775	.3931	-.5533	-.5557	-.5562	-.5633
	.900	.4314	-.4855	-.5081	-.4910	-.5300

ALPHA (5) = 11.915 BETA (2) = .187 MACH = 1.2483 0 = 600.41 P = 550.41 RNL = 3.0228

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(OAI4B) - 140A/B/C/R ORB VERTICAL

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ALPHA (δ) = 11.907 BETA (β) = 4.269 MACH = 1.2483 0 = 600.41 P = 550.41 RN/L = 3.0228

SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP

(XEBV19)

X/CV	Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
.00	.6590	.4324			.2776		.1715	.0957
.025	.0659	-.2393			-.4555		-.5839	-.6740
.050	.1249	-.2224			-.4933		-.5817	-.6502
.150	.1626	-.1004			-.2767		-.3389	-.4076
.300	.0318	-.1473			-.2058		-.2452	-.2579
.520	-.2115	-.2401			-.2207		-.2283	-.2162
.655	-.4326	-.6299	-.1921		-.6526	-.5786	-.5971	-.5381
.775	-.3634	-.5165	-.6021		-.5978	-.5969	-.5857	-.5790
.900	-.4196	-.5617	-.6040		-.6035	-.6035	-.5900	-.5790

PRESSURE DATA - OAI4B (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

EXERCISES

REFERENCE DATA							PARAMETRIC DATA			
SREF	2620.0000 SQ.FT.			XMRP	=	1076.6800 IN.	X0	RUDDER =	.000	SPDBRK =
LREF	47-.6000 IN.			YMRP	=	.0000 IN.	Y0	BLFLAP =	-11.700	L-ELVN =
BREF	935.0580 IN.			ZMRP	=	375.0000 IN.	Z0	R-ELVN =	.000	MACH =
SCALE	.3300									1.100
ALPHA (1) = -4.047	SECTION 1 : VERTICAL			BETA (1) = -3.843	MACH = 1.1022	Q = 601.66	P = 707.48	RNL = 3.1693		
Z/BV	.1580 .3170 .4590			.6020	.6970	.8390	.9250			
X/CY	.000 6880 .5498			.5311	.5543	.5188				
	.025 5263 .3566			.3391	.3365	.2891				
	.050 5180 .3695			.3306	.3256	.2905				
	.150 .3790 .2791			.2545	.2395	.2057				
	.300 .2295 .1959			.1756	.1722	.1021				
	.520 .0569 .0240			.0306	.0046	-.1183				
	.665 -.4541 -.6537			.2027	.7517	.6563	-.7097	-.7261		
	.775 -.3483 -.5150			-.6114	-.6016	-.6414	-.6617	-.7055		
	.900 -.4079 -.5999			-.5798	-.6151	-.6634	-.6644			
ALPHA (1) = -3.971	SECTION 1 : VERTICAL			BETA (2) = .189	MACH = 1.1022	Q = 601.66	P = 707.48	RNL = 3.1693		
Z/BV	.1580 .3170 .4590			.6020	.6970	.8390	.9250			
X/CY	.000 .7432 -.6162			.6065	.5764	.5040				
	.025 .2499 -.0171			-.1309	-.1498	-.112				
	.050 .3732 .1975			.0333	-.0431	-.0223				
	.150 .2905 .1239			.0844	-.0743	-.0746				
	.300 .1229 .0584			.0584	.0475	.0216				
	.520 -.0249 -.5598			-.6817	-.0535	-.1357				
	.675 -.4161 -.6927			-.2008	-.7761	-.6921	-.7147	-.7168		
	.775 -.3503 .5319			-.6706	-.6677	-.6812	-.6929	-.7111		
	.900 -.4214 -.6276			-.6405	-.6770	-.6906	-.6995	-.7020		

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

A_PHA (1) = -3.999 BETA (2) = -4.285 MACH = 1.1022 0 = 601.66 P = 707.48 RN/L = 3.1693

SECTION : 1. VERTICAL

DEPENDENT VARIABLE CP

Z/EV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6715 .5381 .4975 .4148 .3721

.025 .0319 -.3249 -.5048 -.7630 -.7985

.050 .0473 -.2450 -.5173 -.7658 -.7649

.150 .1303 -.0731 -.2213 -.3937 -.5760

.250 .0230 -.0923 -.1970 -.1795 -.1546

.520 -.1250 -.1677 -.1842 -.2208 -.1793

.935 -.4536 -.7194 -.2092 -.7393 -.7124

.775 -.3932 -.5535 -.7259 -.6940 -.6973

.200 -.4545 -.6555 -.7067 -.7093 -.6899

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

ALPHA (2) = -.035 BETA (1) = -3.867 MACH = 1.1011 0 = 601.17 P = 708.39 RN/L = 3.1906

SECTION : 1. VERTICAL

DEPENDENT VARIABLE CP

Z/EV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .8469 .4852 .4517 .4581 .4273

.025 .1613 .2953 .2561 .2608 .2296

.050 .4627 .2975 .2535 .2511 .2255

.150 .3263 .2124 .1903 .1699 .1399

.250 .1632 .1163 .1085 .1066 .0477

.520 -.2632 -.5392 -.0831 -.0395 -.1652

.685 -.4426 -.6789 -.1788 -.6643 -.7246

.775 -.3506 -.5106 -.5253 -.6325 -.7502

.875 -.4131 -.5525 -.6124 -.6394 -.7295

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

ALPHA (2) = -.059 BETA (2) = -.183 MACH = 1.1011 0 = 601.17 P = 708.39 RN/L = 3.1906

SECTION : 1. ERECTA

DEPENDENT VARIABLE CP

Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

.024 .1105 .1527 .5584 .5298 .4886 .4213

.050 .1636 .1625 -.1553 -.1726 -.1873 -.2523

.150 .2263 .1475 .0358 -.1303 -.1910

.250 .1627 .1575 .0274 .0167 -.0256

.520 .1618 .1531 .0340 .0037 -.0267

.685 .1609 .1517 -.1277 -.0962 -.1722

.775 .1617 -.1700 -.1735 -.6991 -.7342

.875 .1620 -.1615 -.1600 -.6852 -.7095 -.7345

.200 -.1620 -.1615 -.1600 -.6852 -.7095 -.7345

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

.200 -.4131 -.5525 -.6124 -.6394 -.7053

.4555 -.6555 -.7067 -.7093 -.6899 -.6742

.775 -.3506 -.5106 -.5253 -.6325 -.7295

.875 -.4131 -.5525 -.6124 -.6394 -.7053

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6680

$\alpha_{\text{PA}} = 3.921$ $\beta_{\text{PA}} = 4.251$ MACH = 1.1013 0 = 601.26 P = 708.16 RNL = 3.1838
 SECTION (1) VERTICAL
 $Z/B = .1580$ $.3170$ $.4590$ $.6020$ $.6970$ $.8390$ $.9250$

X/CY	5825	.4297	.351	.2465	.1516
.025	-.0294	-.3755	-.5561	-.7700	-.8359
.050	-.0391	-.3608	-.6068	-.7517	-.8088
.150	.0456	-.1764	-.3514	-.4920	-.4264
.250	-.0520	-.1741	-.2731	-.2700	-.2614
.520	-.2535	-.2659	-.2650	-.2724	-.3033
.695	-.3354	-.6955	-.1623	-.7731	-.7473
.775	-.3234	-.4934	-.7047	-.7361	-.7405
.850	-.4113	-.5105	-.7165	-.7617	-.7510
ALPHA (1) = 7.853	BETA (1) = -3.864	MACH = 1.1008	0 = 600.53	P = 707.91	RNL = 3.1857
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP			
Z/B	.1580	.3170	.4590	.6020	.6970
X/CY	6117	.2359	.3013	.2755	.2521
.025	-.3362	-.1501	-.0983	-.1357	-.1286
.050	-.3625	-.1714	-.1030	-.1279	-.1195
.150	-.2172	-.1576	-.0522	-.0579	-.0362
.250	-.1735	-.1274	-.0024	-.0062	-.0355
.520	-.1164	-.1215	-.1596	-.1162	-.2241
.695	-.1156	-.1274	-.1703	-.6848	-.7233
.775	-.1542	-.1650	-.6495	-.5532	-.7049
.850	-.1432	-.1550	-.5782	-.6444	-.6482
ALPHA (1) = 7.855	BETA (1)21 = .190	MACH = 1.1008	0 = 600.53	P = 707.91	RNL = 3.1857
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP			
Z/B	.1580	.3170	.4590	.6020	.6970
X/CY	6125	.372	.1591	.3047	.2074
.025	-.1271	-.1653	-.2793	-.2978	-.3585
.050	-.1259	-.1562	-.2154	-.3025	-.3092
.150	-.1558	-.1666	-.0972	-.1031	-.0983
.250	-.1354	-.1259	-.1232	-.1083	-.1281
.520	-.1557	-.1254	-.2208	-.1716	-.2550
.695	-.1353	-.1284	-.1519	-.7208	-.7739
.775	-.1356	-.1282	-.7356	-.7494	-.7516
.850	-.1356	-.1282	-.5441	-.7208	-.7299

DATE 14 FEB 75

TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

PAGE 6681

ALPHA (1+) = 7.853 BETA (3) = 4.247 MACH = 1.1008 Q = 600.53 P = 707.91 RN/L = 3.1857
 SECTION 1 : VERTICAL

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL
 DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.050	.5005	.3825		.2696		.1667	.0545
.055	-.0389	-.3793		-.5840		-.7639	-.8615
.059	.0229	-.3370		-.6293		-.7352	-.8267
.150	.0705	-.1954		-.4010		-.4657	-.4690
.150	-.1207	-.2267		-.2901		-.3342	-.3232
.152	-.3072	-.3287		-.3059		-.2827	-.3160
.155	-.4281	-.6552		-.1682	-.8530	-.7841	-.7744
.175	-.3713	-.4950		-.7084	-.7731	-.7800	-.7559
.192	-.4555	-.5055		-.5055	-.5641	-.6949	-.7532

ALPHA (5) = 11.933 BETA (1) = -3.846 MACH = 1.1003 Q = 600.53 P = 708.60 RN/L = 3.1882
 SECTION 1 : VERTICAL

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL
 DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.050	.6257	.3593		.2374		.1812	.1624
.055	.1858	.6322		.0500		.0849	.0867
.059	.2772	.1265		.0567		.0726	.0731
.150	.1412	.5353		.0060		.0081	.0036
.150	-.0393	-.5650		-.0433		-.0455	-.0459
.152	-.1482	-.1430		-.1547		-.1399	-.2443
.155	-.5113	-.7151		-.1797	-.8105	-.6967	-.7170
.175	-.2152	-.6151		-.5592	-.6768	-.6995	-.7137
.192	-.4452	-.6540		-.6376	-.6284	-.6850	-.7236

ALPHA (5) = 11.911 BETA (2) = .168 MACH = 1.1003 Q = 600.53 P = 708.60 RN/L = 3.1882
 SECTION 1 : VERTICAL

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL
 DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.050	.5255	.3939		.2920		.2106	.0967
.055	.1855	-.1828		-.3210		-.3326	-.4006
.059	.2545	.0163		-.2687		-.3397	-.3595
.150	.1315	-.3795		-.1530		-.1624	-.1584
.150	-.0712	-.1649		-.1799		-.1669	-.1786
.152	-.2461	-.2591		-.2640		-.2162	-.2931
.155	-.4635	-.4632		-.1620	-.8348	-.7411	-.7964
.175	-.1635	-.1632		-.7554	-.7473	-.7690	-.7843
.192	-.4438	-.4438		-.5357	-.7342	-.7470	-.7653

1. DATA : E₁ = 11.905 BETA (3) = 4.263 MACH = 1.1003 Q = 600.53 P = 708.60 RNL = 3.1882
 2. POSITION : 1. VERTICAL
 2. ZY : 1.540 -3.170 -.590 .6120 .6970 .8390 .9250
 3. CY :
 0.00 6292 .7538 .2028 .0706 -.2672
 0.25 -.0128 -.3518 -.6075 -.7367 -.8491
 0.50 -.0872 -.7335 -.6409 -.7289 -.8803
 0.75 -.0637 -.2119 -.4519 -.4727 -.5432
 1.00 -.1542 -.6620 -.3239 -.4236 -.4552
 1.25 -.3459 -.2850 -.3397 -.3558 -.3469
 1.50 -.4465 -.8862 -.1759 -.8663 -.7824 -.7775 -.7960
 1.75 -.3629 -.6162 -.1650 -.7562 -.7936 -.7745 -.7513
 2.00 -.4143 -.5182 -.4143 -.5321 -.5784 -.7547 -.7689

AMES 11-073(OAI4B) -140A/B/C/R ORB VERTICAL

(XEBV20)

DEPENDENT VARIABLE CP

(XEBV20)

DATE 14 FEB 75

TABULATED PRESSURE DATA - OAI14B (AMES 11-073-1)

AMES 11-073(OAI14B) - 140A/B/C/R ORB VERTICAL

REFERENCE DATA

STATE	1532.0000 SQ.FT.	X ^{1/2} P	1075.6600 IN. X0
L-B.F	.471 .8000 IN.	1.44P	.0000 IN. Y0
B-B.F	.471 .8000 IN.	2.14P	.575.3000 IN. Z0
Surface	.0000		

ALPHA (1) = -4.037 BETA (1) = -3.849 MACH = .90000 Q = 600.22 P = 1058.5 R/L = 3.5693

SECTION 1 : VERTICAL

Z/B	Y/ACV	DEPENDENT VARIABLE CP
-1.530	.3170	.4590
-1.525	.4304	.3500
-1.520	.2485	.2124
-1.515	.3209	.2133
-1.510	.1325	.1153
-1.505	.0421	.0170
-1.500	.1846	.1769
-1.495	.2034	.1593
-1.490	.2128	.1672
-1.485	.2333	.1621
-1.480	.2074	.2059
-1.475		
-1.470		
-1.465		
-1.460		
-1.455		
-1.450		
-1.445		
-1.440		
-1.435		
-1.430		
-1.425		
-1.420		
-1.415		
-1.410		
-1.405		
-1.400		
-1.395		
-1.390		
-1.385		
-1.380		
-1.375		
-1.370		
-1.365		
-1.360		
-1.355		
-1.350		
-1.345		
-1.340		
-1.335		
-1.330		
-1.325		
-1.320		
-1.315		
-1.310		
-1.305		
-1.300		
-1.295		
-1.290		
-1.285		
-1.280		
-1.275		
-1.270		
-1.265		
-1.260		
-1.255		
-1.250		
-1.245		
-1.240		
-1.235		
-1.230		
-1.225		
-1.220		
-1.215		
-1.210		
-1.205		
-1.200		
-1.195		
-1.190		
-1.185		
-1.180		
-1.175		
-1.170		
-1.165		
-1.160		
-1.155		
-1.150		
-1.145		
-1.140		
-1.135		
-1.130		
-1.125		
-1.120		
-1.115		
-1.110		
-1.105		
-1.100		
-1.095		
-1.090		
-1.085		
-1.080		
-1.075		
-1.070		
-1.065		
-1.060		
-1.055		
-1.050		
-1.045		
-1.040		
-1.035		
-1.030		
-1.025		
-1.020		
-1.015		
-1.010		
-1.005		
-1.000		
-0.995		
-0.990		
-0.985		
-0.980		
-0.975		
-0.970		
-0.965		
-0.960		
-0.955		
-0.950		
-0.945		
-0.940		
-0.935		
-0.930		
-0.925		
-0.920		
-0.915		
-0.910		
-0.905		
-0.900		
-0.895		
-0.890		
-0.885		
-0.880		
-0.875		
-0.870		
-0.865		
-0.860		
-0.855		
-0.850		
-0.845		
-0.840		
-0.835		
-0.830		
-0.825		
-0.820		
-0.815		
-0.810		
-0.805		
-0.800		
-0.795		
-0.790		
-0.785		
-0.780		
-0.775		
-0.770		
-0.765		
-0.760		
-0.755		
-0.750		
-0.745		
-0.740		
-0.735		
-0.730		
-0.725		
-0.720		
-0.715		
-0.710		
-0.705		
-0.700		
-0.695		
-0.690		
-0.685		
-0.680		
-0.675		
-0.670		
-0.665		
-0.660		
-0.655		
-0.650		
-0.645		
-0.640		
-0.635		
-0.630		
-0.625		
-0.620		
-0.615		
-0.610		
-0.605		
-0.600		
-0.595		
-0.590		
-0.585		
-0.580		
-0.575		
-0.570		
-0.565		
-0.560		
-0.555		
-0.550		
-0.545		
-0.540		
-0.535		
-0.530		
-0.525		
-0.520		
-0.515		
-0.510		
-0.505		
-0.500		
-0.495		
-0.490		
-0.485		
-0.480		
-0.475		
-0.470		
-0.465		
-0.460		
-0.455		
-0.450		
-0.445		
-0.440		
-0.435		
-0.430		
-0.425		
-0.420		
-0.415		
-0.410		
-0.405		
-0.400		
-0.395		
-0.390		
-0.385		
-0.380		
-0.375		
-0.370		
-0.365		
-0.360		
-0.355		
-0.350		
-0.345		
-0.340		
-0.335		
-0.330		
-0.325		
-0.320		
-0.315		
-0.310		
-0.305		
-0.300		
-0.295		
-0.290		
-0.285		
-0.280		
-0.275		
-0.270		
-0.265		
-0.260		
-0.255		
-0.250		
-0.245		
-0.240		
-0.235		
-0.230		
-0.225		
-0.220		
-0.215		
-0.210		
-0.205		
-0.200		
-0.195		
-0.190		
-0.185		
-0.180		
-0.175		
-0.170		
-0.165		
-0.160		
-0.155		
-0.150		
-0.145		
-0.140		
-0.135		
-0.130		
-0.125		
-0.120		
-0.115		
-0.110		
-0.105		
-0.100		
-0.095		
-0.090		
-0.085		
-0.080		
-0.075		
-0.070		
-0.065		
-0.060		
-0.055		
-0.050		
-0.045		
-0.040		
-0.035		
-0.030		
-0.025		
-0.020		
-0.015		
-0.010		
-0.005		
-0.000		

SECTION 1 : VERTICAL BETA (2) = .192 MACH = .90000 Q = 600.22 P = 1058.5 R/L = 3.5693

SECTION 1 : VERTICAL

Z/B	Y/ACV	DEPENDENT VARIABLE CP
-0.532	.4487	.4910
-0.525	.2707	.3557
-0.517	.5163	.0465
-0.510	.3221	.0628
-0.503	.120	.1184
-0.496	.2844	.2750
-0.489	.3632	.1955
-0.482	.2535	.5444
-0.475	.2624	.2567
-0.468	.2559	.2559
-0.461		
-0.454		
-0.447		
-0.440		
-0.433		
-0.426		
-0.419		
-0.412		
-0.405		
-0.398		
-0.391		
-0.384		
-0.377		
-0.370		
-0.363		
-0.356		
-0.350		
-0.343		
-0.336		
-0.330		
-0.323		
-0.316		
-0.310		
-0.303		
-0.296		
-0.290		
-0.283		
-0.276		
-0.270		
-0.263		
-0.256		
-0.250		
-0.243		
-0.236		
-0.230		
-0.223		
-0.216		
-0.210		
-0.203		
-0.196		
-0.190		
-0.183		
-0.176		
-0.170		
-0.163		
-0.156		
-0.150		
-0.143		
-0.136		
-0.130		
-0.123		
-0.116		
-0.110		
-0.103		
-0.096		
-0.090		
-0.083		
-0.076		
-0.070		
-0.063		
-0.056		
-0.050		
-0.043		
-0.036		
-0.030		
-0.023		
-0.016		
-0.010		
-0.003		
0.000		

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(X881) (13 AUG 75)

DATE 14 FEB 76

REGULATED PRESSURE DATA - CAVIB (AMES 11-073-1)

PAGE 56A

$\Delta P + A (1) = -4.042$ $\text{BETA} (1) = .974$ $\text{MACH} = 4.289$ $\text{P} = 600.22$ $\text{P} = 1058.5$ $\text{RNL} = 3.5693$

SECTION 1: LATERAL

Z-EV .1550 .3170 .4530 .6020 .6970 .8390 .9250

X/CY

.000	.4645	.3332	.3123	.2210	.1561
.125	-.2112	-.6784	-.8772	-.9026	-.7862
.150	-.1505	-.1573	-.7895	-.8955	-.7780
.175	-.1580	-.3415	-.4998	-.7390	-.7256
.200	-.2449	-.2366	-.4299	-.5380	-.6049
.225	-.3231	-.1565	-.4171	-.4486	-.4469
.250	-.3843	-.1435	-.1994	-.5203	-.6469
.275	-.2138	-.2135	-.5132	-.6478	-.2908
.300	-.2601	-.2601	-.1749	-.2733	-.2791

A_EPA (2) = -.024 $\text{BETA} (1) = -3.875$ $\text{MACH} = .89917$ $\text{P} = 599.38$ $\text{P} = 1058.5$ $\text{RNL} = 3.5692$

SECTION 1: LATERAL

Z-EV .1550 .3170 .4530 .6020 .6970 .8390 .9250

X/CY

.000	-.2248	.2687	.2743	.3182	.2709
.125	-.0868	-.1567	-.2264	-.2076	.1560
.150	-.1231	-.1517	-.1743	-.1867	-.1419
.175	-.1633	-.1654	-.0958	-.0730	.0220
.200	-.1162	-.1162	-.0443	-.0304	-.1243
.225	-.1161	-.1155	-.2433	-.3018	-.2292
.250	-.0842	-.0814	-.1487	-.7850	-.7015
.275	-.1212	-.1214	-.4471	-.4314	-.3544
.300	-.1212	-.1214	-.2135	-.1955	-.4321

A_EPA (2) = .031 $\text{BETA} (1) = .185$ $\text{MACH} = .89917$ $\text{P} = 599.38$ $\text{P} = 1058.5$ $\text{RNL} = 3.5692$

SECTION 1: LATERAL

Z-EV .1550 .3170 .4530 .6020 .6970 .8390 .9250

X/CY

.000	-.0212	-.0212	-.4302	-.4150	.3289
.125	-.0212	-.0212	-.3500	-.3364	-.4440
.150	-.0212	-.0212	-.0778	-.1353	-.2799
.175	-.0212	-.0212	-.1973	-.1261	-.1151
.200	-.0212	-.0212	-.1410	-.1372	-.1931
.225	-.0212	-.0212	-.2932	-.3478	-.3580
.250	-.0212	-.0212	-.1517	-.6823	-.5136
.275	-.0212	-.0212	-.4622	-.5556	-.3513
.300	-.0212	-.0212	-.2633	-.1511	-.2930

A_EPA (2) = .031 $\text{BETA} (1) = .185$ $\text{MACH} = .89917$ $\text{P} = 599.38$ $\text{P} = 1058.5$ $\text{RNL} = 3.5692$

DATE 10-21-66

REGULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073/0A1481 - 140A/B/C/R CRB VERTICAL

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$\alpha_{\text{alpha}} = 2.921 \quad \beta_{\text{beta}} = 3.131 \quad \gamma_{\text{gamma}} = 4.265 \quad \text{MACH} = .69917 \quad Q = 599.08 \quad P = 1058.5 \quad Rn/L = 3.5682$

SECTION 1 - VERTICAL

A/CAV	0.00	.4157	.2693	.2322	.1366	.0749
0.25	-1.2763	-1.7254	-1.8929	-1.7859	-1.6400	
0.50	-1.1939	-1.6426	-1.8279	-1.7772	-1.6512	
0.75	-1.1822	-1.3935	-1.5790	-1.7473	-1.6282	
1.00	-1.2033	-1.2967	-1.6038	-1.6357	-1.5993	
1.25	-1.1561	-1.2851	-1.3973	-1.4476	-1.4993	
1.50	-1.1647	-1.2642	-1.4213	-1.3553	-1.2592	
1.75	-1.2035	-1.2761	-1.4213	-1.3778	-1.2658	
2.00	-1.2635	-1.1604	-1.1595	-1.0934	-1.0827	

$\alpha_{\text{alpha}} = 3.922 \quad \beta_{\text{beta}} = 1.11 \quad \gamma_{\text{gamma}} = -3.878 \quad \text{MACH} = .89950 \quad Q = .89950 \quad P = 1058.3 \quad Rn/L = 3.5682$

SECTION 1 - VERTICAL

A/CAV	0.00	.3170	.4590	.6020	.6970	.8390	.9250
0.25	.3720	.2151	.1819	.1879	.2591	.1902	
0.50	.2163	.1593	.1557	.1814	.1814	.1307	
0.75	.2577	.1559	.1559	.1545	.1545	.1087	
1.00	.1579	.1265	.0658	.0524	.0524	.0101	
1.25	.1252	.1233	.0309	.0507	.0507	.1413	
1.50	.1252	.1231	.2339	.3197	.3197	.3263	
1.75	.1268	.1453	.1460	.5963	.6730	.3540	
2.00	.1265	.1375	.1379	.3159	.4030	.3393	
2.25	.1253	.1233	.2127	.1735	.1130	.1248	

$\alpha_{\text{alpha}} = 4.975 \quad \beta_{\text{beta}} = 1.21 \quad \gamma_{\text{gamma}} = .188 \quad \text{MACH} = .89950 \quad Q = .89950 \quad P = 1058.3 \quad Rn/L = 3.5682$

SECTION 1 - VERTICAL

A/CAV	0.00	.3170	.4590	.6020	.6970	.8390	.9250
0.25	.4716	.3130	.1569	.3554	.2574		
0.50	.3551	.3721	.4693	.3193	.4196		
0.75	.3457	.4225	.4911	.3319	.2424		
1.00	.3625	.1571	.1637	.1269	.1200		
1.25	.1213	.1613	.1445	.1471	.2074		
1.50	.1625	.1684	.2233	.3643	.3605		
1.75	.1445	.1459	.5564	.6811	.4808		
2.00	.1616	.1450	.5653	.4302	.2992		
2.25	.1675	.1727	.1623	.1111	.1265		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

ALPHA (1) = 8.014 BETA (3) = 4.257 MACH * .8994 3 Q = 599.41 P = 1058.5 RN/L = 3.5684

SECTION (1) VERTICAL

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3423 .1692 .0593 -.0162 -.1469
.025 -.2681 -.7753 -.8974 -.6934 -.9013
.050 -.1537 -.7279 -.8715 -.6634 -.8809
.150 -.1961 -.4653 -.5870 -.6478 -.7351
.300 -.3754 -.4544 -.4665 -.6070 -.5403
.520 -.4769 -.3764 -.3679 -.6092 -.2313
.695 -.2693 -.2844 -.1702 -.4633 -.4199
.775 -.1917 -.2690 -.3360 -.2945 -.1948
.900 -.2572 -.2572 -.1791 -.1361 -.0848 -.0584
ALPHA (5) = 11.899 BETA (1) = -3.861 MACH = .90017 Q = 600.39 P = 1058.5 RN/L = 3.5727

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3612 .1333 .0737 .1042 .0658
.025 -.0208 -.0620 .1218 .1343 .0969
.050 -.0355 -.0206 .0924 .1123 .0708
.150 -.0585 -.0819 .0239 .0128 -.0420
.300 -.1820 -.1261 .0630 .0749 -.1736
.520 -.2275 -.2276 -.2597 .0749 -.3250
.685 -.3075 -.4570 -.1753 -.5538 -.4888
.775 -.2177 -.2513 -.3487 -.2919 -.2716
.900 -.2345 -.2345 -.2047 -.1531 -.1107 -.0544
ALPHA (5) = 11.956 BETA (2) = .190 MACH = .90017 Q = 600.39 P = 1058.5 RN/L = 3.5727

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .3745 .2295 .2708 .2466 .1399
.025 -.0728 -.3630 -.3984 -.3370 -.4424
.050 -.0084 -.2680 -.1699 -.1507 -.2636
.150 -.0920 -.2418 -.1578 -.1673 -.1596
.300 -.2534 -.2743 -.1747 -.1782 -.2289
.520 -.3732 -.3076 -.3143 -.3942 -.3807
.685 -.2944 -.3808 -.1822 -.5520 -.6511 -.4265
.775 -.2227 -.2564 -.3772 -.3+03 -.3292 -.2619
.900 -.2454 -.2037 -.1517 -.1026 -.0625 .0085

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(XE9W21)

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

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AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

ALPHA : 5) = 11.948 BETA (3) = 4.274 MACH = .90017 Q = 600.39 P = 1053.5 R/N/L = 3.5727
SECTION : INVERTICAL
Z/BV

X/CV	.000	.3358	.1437	.0095	-.0983	-.2130
.325	-.1451	-.6429	-.8884	-.8884	-.6671	-.7760
.050	-.0753	-.5303	-.3671	-.3671	-.6515	-.7719
.150	-.1436	-.4261	-.6318	-.6318	-.6723	-.6477
.200	-.3282	-.4155	-.4729	-.4729	-.6193	-.5658
.520	-.4326	-.4337	-.2511	-.2511	-.4127	-.3179
.695	-.2395	-.3247	-.1839	-.4614	-.4288	-.2439
.775	-.2116	-.2939	-.3027	-.2760	-.2137	-.1559
.300	-.2570	-.2100	-.1327	-.0905	-.0364	-.0286

(XEV21)

DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

REFERENCE DATA

XREF = 1400.0000 SQ.FT.
 XREF = .0000 IN.
 ZREF = .335 IN.
 SCALE = .2500

ALPHA (1) = -4.045 BETA (1) = -7.856 MACH = .59680

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z / BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X / CV							
.000	-.0019	-.2478		-.1854		-.0209	-.0578
.025	.4750	.4201		.4520		.4331	.3963
.050	.4239	.3659		.3906		.3875	.3444
.150	.2623	.2272		.2422		.2335	.1832
.300	.1216	.0935		.1170		.0965	.0305
.520	-.1335	-.1624		-.1792		-.1903	-.1769
.655	-.2363	-.2746		-.1222	-.3061	-.2480	-.2618
.775	-.1655	-.1818		-.1638	-.1520	-.1331	-.1478
.900	-.1425	-.1057		-.0633	-.0720	-.0692	-.1035

ALPHA (1) = -3.970 BETA (2) = -3.843 MACH = .59680

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z / BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X / CV							
.000	.3569	.2281		.2510		.3829	.3105
.025	.3012	.2331		.2567		.2359	.2100
.050	.2751	.2096		.2174		.2108	.1926
.150	.1503	.0932		.1045		.0974	.0802
.200	.0230	.0098		.0035		.0047	-.0355
.520	-.1932	-.2349		-.2464		-.2521	-.2165
.685	-.2393	-.3045		-.1217	-.3494	-.2907	-.2759
.775	-.1677	-.1935		-.1847	-.1667	-.1366	-.1395
.900	-.1422	-.0869		-.0633	-.0434	-.0192	-.0196

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(XE8V22) (13 AUG 75)

PARAMETRIC DATA

RUDDER = .000
 BDFLAP = -11.700
 R-ELVN = .000
 L-ELVN = .000
 MACH = .600

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

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ALPHA (1) = -3.957 BETA (3) = .189 MACH = .59680 0 = 594.79 P = 2385.6 RNL = 4.8530

SECTION 1 INERTIAL

Z/EV .1190 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
.000 -.4924 .4487 .4899 .4802 .4383
.225 -.0263 -.3119 -.3526 -.2357 -.4371
.050 .0863 -.0768 -.0834 -.0888 -.0914
.150 -.0136 -.0768 -.0834 -.0964 -.0790
.350 -.2661 -.1330 -.1273 -.1135 -.1374
.520 -.2568 -.3157 -.3272 -.3365 -.2712
.635 -.2406 -.3329 -.1251 -.3732 -.3585 -.2829
.775 -.1841 -.1937 -.2348 -.2005 -.1811 -.1070
.650 -.1268 -.1075 -.0715 -.0459 -.0132 .0151

ALPHA (1) = -3.955 BETA (4) = 4.271 MACH = .59680 0 = 594.79 P = 2385.6 RNL = 4.8530

SECTION 1 INERTIAL

Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
.000 .3205 .1734 .1987 .0980 .1237
.055 -.3031 -.6049 -.5961 -.5649 -.9871
.059 -.2714 -.4643 -.5321 -.5363 -.9604
.150 -.2361 -.3567 -.4278 -.4564 -.3958
.250 -.2259 -.2693 -.3486 -.3242 -.2754
.420 -.3332 -.3748 -.4216 -.4043 -.3196
.585 -.2631 -.3541 -.1400 -.4216 -.3550
.715 -.2531 -.2455 -.2462 -.2378 -.1824 -.2777
.775 -.15C4 -.11119 -.0919 -.0547 -.0437 -.0259

ALPHA (1) = -4.005 BETA (5) = 8.350 MACH = .59680 0 = 594.79 P = 2385.6 RNL = 4.8530

SECTION 1 INERTIAL

Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
.000 -.0620 .4321 -.3128 -.4640 -.3494
.045 -.5712 -.10781 -.7933 -.8440 -.11930
.050 -.5619 -.8691 -.7689 -.8105 -.10612
.150 -.7018 -.8916 -.7131 -.7508 -.7850
.350 -.3731 -.4397 -.6248 -.6198 -.6031
.625 -.3719 -.3559 -.4921 -.4586 -.3780
.935 -.2357 -.3554 -.1489 -.2956 -.3202
.975 -.2233 -.2019 -.2271 -.1915 -.2754 -.2496
.995 -.1913 -.1247 -.1537 -.1260 -.1581 -.1785

(XEBV22)

(XEBV22)

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TABULATED PRESSURE DATA - OA149 (AMES 11-073-1)

ALPHA (2) = -.025 BETA (1) = -7.896 MACH = .59678 Q = 594.66 P = 2385.3 RNL = 4.8568
 AMES 11-073(OA149) -140A/B/C/R ORB VERTICAL

SECTION 1: INERTIAL

Z, BY .1580 .3170 .4530 .6020 .6970 .8390 .9250

X,CY -.C495 -.3042 -.2891 -.1419 -.1732
.025 -.4366 .3727 .4161 .3976 .3579
.050 .5758 .3254 .3562 .3520 .3072

.150 .2267 .1958 .2117 .2083 .1561

.300 .0563 .0688 .1001 .0863 .0099

.520 -.1444 -.1648 -.1777 -.1825 -.1717

.695 -.2360 -.2747 -.1116 -.2328 -.2458

.775 -.1610 -.1641 -.1546 -.1468 -.1456

.302 -.1453 -.1067 -.0835 -.0806 -.1026

ALPHA (2) = -.014 BETA (2) = -3.863 MACH = .59678 Q = 594.66 P = 2385.3 RNL = 4.8568

SECTION 2: INERTIAL

Z, BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X,CY .3228 .1636 .1783 .3014 .2231
.025 .2658 .1995 .2283 .2084 .1853
.050 .2331 .1789 .1854 .1875 .1736

.150 .1122 .0722 .0952 .0791 .0597

.300 -.0101 -.0294 -.0161 -.0135 -.0551

.520 -.2117 -.2434 -.2513 -.2501 -.2094

.685 -.2341 -.3071 -.1172 -.3270 -.2738

.775 -.1734 -.1895 -.1902 -.1632 -.1395

.900 -.1313 -.0978 -.0712 -.0489 -.0171

ALPHA (2) = .070 BETA (3) = .189 MACH = .59678 Q = 594.66 P = 2385.3 RNL = 4.8568

SECTION 3: INERTIAL

Z, BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X,CY -.025 -.0503 -.3332 -.4306 .4140 .3677
.050 -.0460 -.0635 -.1026 -.1031 -.1043

.150 -.0269 -.1264 -.1016 -.1043 -.0895

.300 -.1254 -.1526 -.1405 -.1149 -.1506

.520 -.2763 -.3154 -.3296 -.3251 -.2709

.695 -.2441 -.3225 -.1219 -.3860 -.3364

.775 -.1675 -.1955 -.2514 -.1994 -.1707

.900 -.1352 -.1085 -.0798 -.0552 -.0186

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-I)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

$\alpha_{\text{OA148}} (2) = 3.976 \quad \beta_{\text{OA148}} (2) = -3.856 \quad MACH = .59760 \quad Q = 596.20 \quad P = 2385.0 \quad RN/L = 4.8688$

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

X/CY	Z/BV	$\alpha_{\text{OA148}} (2)$	$\beta_{\text{OA148}} (2)$	MACH	Q	P	RN/L	RN/L
.000	.1590	.3170	.4590	.6020	.6970	.8390	.9250	(XEBV22)
.025	.2170	.1651	.1196	.1125	.2345	.1533		
.050	.1910	.1471	.1628	.1988	.1656			
.100	.0747	.0490	.0612	.1643	.1427			
.150	.0391	.0439	.0261	.0659	.0378			
.200	.2149	.2384	.2455	.0249	.0647			
.250	.2355	.3132	.1123	.2422	.2155			
.300	.1678	.1985	.1950	.2630	.2542			
.350	.1457	.1035	.0565	.1440	.1283			
				.0509	.0204			

$\alpha_{\text{OA148}} (3) = 3.935 \quad \beta_{\text{OA148}} (3) = .172 \quad MACH = .59760 \quad Q = 596.20 \quad P = 2385.0 \quad RN/L = 4.8680$

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

X/CY	Z/BV	$\alpha_{\text{OA148}} (3)$	$\beta_{\text{OA148}} (3)$	MACH	Q	P	RN/L	RN/L
.000	.1590	.3170	.4590	.6020	.6970	.8390	.9250	(XEBV22)
.025	.0773	.3291	.3799	.3643	.3031			
.050	.0147	.0844	.3268	.2123	.3924			
.100	.0524	.1136	.1059	.0963	.1082			
.150	.1458	.1535	.1103	.1084	.0914			
.200	.2943	.3132	.1462	.1207	.1459			
.250	.2455	.3333	.3171	.3098	.2592			
.300	.1935	.2037	.3711	.3056	.2483			
.350	.1441	.1441	.2334	.1927	.0961			
			.1059	.0771	.0056			

$\alpha_{\text{OA148}} (4) = 4.026 \quad \beta_{\text{OA148}} (4) = 4.240 \quad MACH = .59760 \quad Q = 596.20 \quad P = 2385.0 \quad RN/L = 4.8680$

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

X/CY	Z/BV	$\alpha_{\text{OA148}} (4)$	$\beta_{\text{OA148}} (4)$	MACH	Q	P	RN/L	RN/L
.000	.1590	.3170	.4590	.6020	.6970	.8390	.9250	(XEBV22)
.025	.3658	.6016	.0832	.0309	.0670			
.050	.5413	.5734	.5815	.5335	.0409			
.100	.3018	.3946	.5292	.5051	.9486			
.150	.3573	.2731	.4722	.4606	.3604			
.200	.3157	.3497	.3650	.3593	.2843			
.250	.2074	.3078	.3813	.3598	.2779			
.300	.1313	.2405	.3898	.3137	.2488			
	.1733	.1106	.2237	.1721	.1167			
			.0872	.0619	.0219			

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REGULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

(XEBV22) RNL = 4.6680

ALPHA : 3) = 4.030 BETA (5) = 8.292 MACH = .59760 Q = 596.20 P = 2395.0 RNL = 4.6680

SECTION : 1) VERTICAL DEPENDENT VARIABLE CP

Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
A/CV	-1.1699	-1.5815	-1.9870	-1.6240	-1.5098		
.025	-1.6424	-1.1045	-1.8006	-1.8333	-1.8457		
.050	-1.6578	-1.2515	-1.7890	-1.8106	-1.7735		
.150	-1.8180	-1.1571	-1.7573	-1.8345	-1.7046		
.300	-1.4050	-1.4404	-1.7473	-1.7914	-1.5726		
.520	-1.3571	-1.3959	-1.5622	-1.4978	-1.4015		
.985	-1.2115	-1.2508	-1.1435	-1.2973	-1.3297		
.175	-1.2160	-1.2545	-1.2375	-1.2853	-1.2287		
.300	-1.1248	-1.1473	-1.1473	-1.1556	-1.1345		
ALPHA : 4) = 7.901 BETA (1) = -7.896 MACH = .59759 Q = 596.20 P = 2395.1 RNL = 4.6692							
SECTION : 1) VERTICAL DEPENDENT VARIABLE CP							
Z/BY	.1590	.3170	.4590	.6020	.6970	.8390	.9250
A/CV	-1.1183	-1.4751	-1.4202	-1.2959	-1.3331		
.150	-1.3653	-1.3735	-1.3551	-1.3174	-1.2685		
.150	-1.3683	-1.2535	-1.2873	-1.2883	-1.2353		
.150	-1.1765	-1.1547	-1.1671	-1.1657	-1.1681		
.300	-1.0561	-1.0413	-1.0726	-1.0570	-1.058		
.520	-1.1618	-1.1529	-1.1574	-1.1643	-1.1554		
.950	-1.1530	-1.2114	-1.1072	-1.2150	-1.2190		
.150	-1.1561	-1.1679	-1.1550	-1.1466	-1.149		
.300	-1.1580	-1.1230	-1.0848	-1.0803	-1.084		
ALPHA : 5) = 7.913 BETA (2) = -3.861 MACH = .59758 Q = 596.20 P = 2395.1 RNL = 4.6692							
SECTION : 1) VERTICAL DEPENDENT VARIABLE CP							
Z/BY	.1520	.3170	.4590	.6320	.6970	.8390	.9250
A/CV	-2.4650	-2.3777	-1.0533	-1.1733	.0900		
.025	-1.732	-1.341	-1.834	-1.7114	-1.462		
.050	-1.1544	-1.1204	-1.408	-1.484	-1.249		
.150	-1.0470	-1.0296	-1.0514	-1.0507	-1.0255		
.300	-1.0544	-1.0563	-1.0241	-1.0305	-1.0714		
.950	-1.2162	-1.2450	-1.379	-1.2279	-1.1972		
.150	-1.2112	-1.1125	-1.3107	-1.2534	-1.2226		
.300	-1.1620	-1.0665	-1.1813	-1.1656	-1.1420		
.950	-1.1754	-1.1553	-1.0695	-1.0516	-1.0225		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 14CA/B/C/R ORB VERTICAL

(XE8V22)

$\text{ALPHA} (+) = 8.0+9 \quad \text{BETA} (- 3) = .175 \quad \text{MACH} = .59758 \quad 0 = 596.20 \quad P = 2385.1 \quad R/V/L = 4.8692$

SECTION : INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

A/C^{*} .3915 .3055 .3236 .3053 .2424

.025 -.0982 -.3561 -.3306 -.2456 -.3952

.050 -.0127 -.1116 -.1143 -.1181 -.1210

.150 -.0550 -.1382 -.1197 -.1230 -.0978

.320 -.1635 -.1715 -.1524 -.1330 -.1526

.520 -.2056 -.2135 -.3178 -.2970 -.2379

.685 -.2240 -.2317 -.1187 -.3457 -.3008

.715 -.1634 -.2264 -.2264 -.1919 -.1682

.720 -.1498 -.1094 -.0790 -.0523 -.0194

.730 -.1119 -.0847 -.0688 -.0385 -.0217

ALPHA (+) = 8.0+9 BETA (- 4) = 4.238 MACH = .59758 0 = 596.20 P = 2385.1 R/V/L = 4.8692

SECTION : INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

A/C^{*} .2184 .3315 .0095 .1039 .1652

.225 -.3521 -.1639 -.5864 -.5303 -.9646

.250 -.3520 -.1639 -.5320 -.5038 -.8512

.150 -.2936 -.3775 -.5052 -.4891 -.4464

.320 -.6223 -.2875 -.3590 -.3682 -.2474

.620 -.3254 -.3254 -.3675 -.3294 -.2500

.695 -.1292 -.2953 -.3123 -.3124 -.2247

.725 -.2232 -.1634 -.2353 -.1829 -.1554

.730 -.1165 -.1119 -.0847 -.0688 -.0385

.730 -.1119 -.0847 -.0688 -.0385 -.0217

ALPHA (+) = 8.0+5 BETA (- 5) = 8.297 MACH = .59758 0 = 596.20 P = 2385.1 R/V/L = 4.8692

SECTION : INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

A/C^{*} -.1934 -.6348 -.5327 -.5327 -.6679 -.5635

.025 -.6639 -.1030 -.7807 -.7978 -.7162

.125 -.6639 -.9576 -.7845 -.7776 -.6771

.150 -.6639 -.1025 -.7713 -.8151 -.6501

.175 -.6639 -.422 -.8058 -.8025 -.5625

.1875 -.3884 -.1384 -.5701 -.4580 -.4350

.195 -.3884 -.1384 -.1114 -.3229 -.3178

.205 -.1670 -.1251 -.2446 -.1958 -.3523

.215 -.1670 -.1251 -.1563 -.0815 -.2993

.225 -.1670 -.1251 -.1563 -.0815 -.2172

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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AMES 11-073(OAI48) - 140A/B/C/R ORB VERTICAL

ALPHA (5) = 11.963 BETA (1) = -7.850 MACH = .59774 Q = 596.43 P = 2384.9 RNL = 4.8734
 SECTION 1: VERTICAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

* C₁
 .020 -1.1236 -.5343 -.5319 -.3830 -.3615
 .025 -.2778 -.2903 .3012 .2816 .2333
 .050 -.2278 -.2529 .2710 .2563 .2073
 .150 -.0315 -.1372 .1651 .1485 .0880
 .250 -.1515 -.1522 .0665 .0539 .0224
 .350 -.1132 -.1139 -.1638 -.1503 -.1473
 .450 -.1132 -.1261 -.1058 -.1993 -.2047 -.2117
 .550 -.1035 -.1269 -.1261 -.1357 -.1267 -.1282
 .650 -.1051 -.1270 -.1558 -.1270 -.0782 -.0726 -.0837

ALPHA (5) = 11.965 BETA (2) = -3.840 MACH = .59774 Q = 596.43 P = 2384.9 RNL = 4.8734
 SECTION 2: VERTICAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

* C₁
 .020 -.2650 .6251 .0007 .1135 .0220
 .025 -.1631 .1153 .1754 .1648 .1339
 .050 -.1145 .0993 .1312 .1366 .1093
 .150 -.1334 .0102 .0104 .0406 .0175
 .250 -.0356 -.0361 -.0336 -.0296 -.0774
 .350 -.0359 -.2471 -.2349 -.2126 -.1825
 .450 -.0364 -.2164 -.2016 -.2162 -.2170
 .550 -.1574 -.1936 -.1829 -.1593 -.1346 -.1115 -.1162
 .650 -.1574 -.1936 -.1077 -.0679 -.0559 -.0209 -.0138

ALPHA (5) = 12.960 BETA (3) = .191 MACH = .59774 Q = 596.43 P = 2384.9 RNL = 4.8734
 SECTION 3: VERTICAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

* C₁
 .020 -.3793 .2763 .2857 .2596 .2003
 .025 -.5245 -.3153 .3060 .2571 .3719
 .050 -.5199 -.1214 .1193 .1040 .1327
 .150 -.5337 -.1171 -.1229 .1203 .1014
 .250 -.5171 -.1825 -.1513 .1326 .1450
 .350 -.5201 -.3133 .3033 .2827 .2291
 .450 -.5202 -.2347 -.1085 -.2902 .2577 .2170
 .550 -.5204 -.2347 -.2272 -.1695 -.1579 .1255 .0935
 .650 -.5205 -.2347 -.2272 -.0986 -.0159 .0030

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL (X/EV22)						
SECTION, (1) VERTICAL DEPENDENT VARIABLE CP						
ALPHA (5) = 12.070	BETA (5) = 8.324	MACH = .59774	Q = 596.43	P = 2384.9	RNL = 4.8734	
Z/EV	.1590	.3170	.4590	.6020	.6970	.8390 .9250
X/EV	.2470	.5200		.0490		.1654 -.2336
	.3674	.6289		.5966		.5237 -.8926
	.3416	.5215		.5443		.5045 -.7672
	.6835	.3736		.5424		.5275 -.5301
	.2930	.2537		.3524		.3663 -.2159
	.3365	.3369		.3604		.3053 -.2082
	.2031	.2412	.1150	.3713	.3152	.2587 -.2221
	.715	.2053	.2055	.2108	.1900	.1495 -.1257
	.1930	.1930	.1122	.0963	.0748	.0349 -.0259
ALPHA (5) = 12.070	BETA (5) = 8.324	MACH = .59774	Q = 596.43	P = 2384.9	RNL = 4.8734	
SECTION, (1) VERTICAL DEPENDENT VARIABLE CP						
Z/EV	.1530	.3170	.4590	.6020	.6970	.8390 .9250
X/EV	.2125	.5359		.6604		.6563 -.5933
	.7746	.6334		.8456		.7024 -.5871
	.7357	.5745		.8429		.7024 -.5606
	.537	.5841		.8554		.6958 -.5178
	.4855	.4557		.8559		.6741 -.4542
	.4538	.4739		.5198		.4772 -.3567
	.5216	.4915	.1222	.4265	.3670	.3926 -.3196
	.4630	.4211	.2191	.4951	.2932	.2985 -.2749
	.2316	.1711	.1604	.1798	.1959	.2179

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DATE 14 FEB 75

TRANSLATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(DA14B) - 140A/B/C/R ORB VERTICAL

PAGE 6698

REFERENCE DATA

REF	NO.	VAL	UNITS	X0	Y0	Z0
1	1	1075	FT.	.1075	.1810	IN. X0
2	2	6.000	IN.	.0000	.0000	IN. Y0
3	3	375.0000	IN.	.375	.0000	IN. Z0
4	4	1.400				

4-B-2 (1) = -7 532 BETA (1) = -3.856 MACH = 1.392+ 0 = 598.36 P = 440.89 RNL = 2.9021

SECTION (1) EPTICAL

Z E/P

1	1553	.5170	.4590	.6020	.6970	.8390	.9250
2	Cp						
3	1.000						
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DATE 11-11-76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

PAGE 6708

ALPHA (2) = .023 BETA (3) = 4.256 MACH = 1.3947 0 = 599.32 P = 440.18 RN/L = 2.9065

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

CUT-OFF / VERTICAL

Z-BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

(XEBV23)

DATE 14 FEB 76

TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

PAGE 670:

ALPHA (3) = 3.971 BETA (3) = 4.247 MACH = 1.3946 0 = 599.62 P = 440.42 RNL = 2.9033

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .220 .5887 .5420 .4577 .3702 .2988
.025 -.1126 -.1598 -.3481 -.4798 -.5454
.050 -.0189 -.1442 -.3776 -.4758 -.5042
.150 -.1457 -.0325 -.1517 -.3664 -.3899
.300 -.0391 -.1036 -.1030 -.0794 -.1311
.520 -.0743 -.0954 -.0863 -.0452 -.0505
.835 -.3490 -.4672 -.1636 -.4786 -.4356
.775 -.3143 -.4597 -.4507 -.4285 -.4361 -.4046
.930 -.2993 -.4545 -.4423 -.4370 -.4273 -.4130

ALPHA (4) = 7.933 BETA (1) = -3.869 MACH = 1.3941 0 = 599.51 P = 440.65 RNL = 2.9093

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .5244 .4895 .4279 .3760 .3661
.025 .2645 .2875 .2345 .2481 .2315
.050 .3949 .3572 .2381 .2405 .2415
.150 .2819 .2148 .1800 .1896 .1875
.300 .1511 .1265 .1262 .1545 .1267
.520 .0239 .0427 .0307 .0943 .0680
.785 -.4032 -.4023 -.1843 -.4556 -.3555
.815 -.3945 -.3995 -.3708 -.3629 -.3839
.930 -.4185 -.3777 -.3609 -.3627 -.3839

ALPHA (4) = 7.908 BETA (2) = .178 MACH = 1.3941 0 = 599.51 P = 440.65 RNL = 2.9093

SECTION (1) VERTICAL

Z/BV .1550 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6960 .5241 .4469 .3777 .3206
.025 .1895 .0402 .0767 .0950 .1518
.050 .3508 .2154 .0729 .1029 .1063
.150 .2352 .1169 .0585 .0493 .0492
.350 .1148 .0357 .0241 .0348 .0227
.570 .0235 .0533 .0456 .0236 .0378
.635 -.4160 -.732 -.1741 -.4738 -.4174
.775 -.3551 -.713 -.4156 -.4128 -.4227
.830 -.562 -.4214 -.4123 -.4177 -.4212ORIGINAL PAGE IS
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DATE : 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA146) - 140AB/C/R ORB VERTICAL (XEBW23)						
ALPHA (+) =	7.872	BETA (3) =	4.245	MACH =	1.3941	P = 599.51
SECTION 1 : VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
DEFINITION VARIABLE CP						
X/CY						
.020	.5574	.5080	.3864	.2999	.2455	
.025	.1077	.1557	.3580	.4671	.5467	
.030	.1519	.1291	.3853	.4737	.5038	
.035	.2425	.2058	.1697	.3214	.3933	
.040	.0440	.0592	.1152	.1195	.1133	
.045	.1173	.1391	.1266	.0913	.0964	
.050	.3718	.4897	.1759	.5022	.4405	.4333
.055	.3564	.4750	.4685	.4545	.4584	.4438
.060	.3594	.4762	.4762	.4626	.4595	.4410 .4333
EQUATION 51 = 11.931 BETA 1 11 = -3.857 MACH = 1.3942 0 = 599.92 P = 440.89 RNL = 2.9149						
SECTION 2 : VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
DEFINITION VARIABLE CP						
X/CY						
.020	.6411	.4560	.3612	.2973	.2882	
.025	.3294	.2534	.1868	.1861	.1720	
.030	.1123	.2691	.1852	.1799	.1817	
.035	.2554	.1646	.1258	.1296	.1288	
.040	.0830	.0583	.0728	.0975	.0769	
.045	.0255	.0232	.0232	.0236	.0301	
.050	.4102	.4181	.1802	.4639	.3669	.3839
.055	.3632	.4150	.3973	.3771	.3943	.4239
.060	.4335	.3865	.3743	.3741	.3937	.4228 .4249
EQUATION 51 = 11.859 BETA 1 21 = .183 MACH = 1.3942 0 = 599.92 P = 440.89 RNL = 2.9149						
SECTION 3 : VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
DEFINITION VARIABLE CP						
X/CY						
.020	.6715	.4825	.3775	.3059	.2590	
.025	.1656	.0129	.1045	.1261	.1773	
.030	.3263	.1803	.1043	.1352	.1330	
.035	.0803	.0950	.0129	.0050	.0025	
.040	.0898	.0013	.0192	.0125	.0236	
.045	.0750	.0952	.0867	.0215	.0767	
.050	.4577	.1842	.4867	.4130	.4324	.4432
.055	.4235	.4515	.4381	.4299	.4394	.4398
.060	.2632	.4454	.4407	.4222	.4351	.4391 .4433

DATE 11, FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

ALPHA (5) = 11.855 BETA (3) = 4.258 MACH = 1.3942 0 = 599.92 P = 440.89 RN/L = 2.9149

SECTION 1 (VERTICAL)

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .5258 .4738 .3141 .2155 .1754

.025 .1169 .1535 .3613 .4593 .5342

.050 .1811 .1412 .3934 .4621 .5092

.150 .2205 .0321 .1962 .3186 .3743

.300 .0462 .0790 .1543 .1681 .1705

.520 .1459 .1711 .1515 .1472 .1305

.685 .3959 .4969 .1905 .4398 .4567

.775 .2517 .4833 .4833 .4474 .4667

.900 .4111 .4914 .4914 .4673 .4626

.975 .4775 .4914 .4769 .4766 .4627 .4522

ALPHA (6) = 15.857 BETA (1) = -3.836 MACH = 1.3942 0 = 599.51 P = 440.65 RN/L = 2.9096

SECTION 1 (VERTICAL)

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7704 .5140 .3336 .2432 .2276

.025 .2093 .1397 .1448 .1405 .1260

.050 .0609 .2595 .1455 .1334 .1334

.150 .2384 .1155 .0861 .0849 .0869

.300 .0052 .0134 .0319 .0537 .0387

.520 .1029 .1074 .0452 .0071 .0514

.645 .4102 .4513 .2063 .3762 .3976 .4341

.775 .3739 .4442 .4183 .3861 .4047 .4257

.900 .4603 .4050 .3854 .3869 .3869 .4298

ALPHA (6) = 15.871 BETA (2) = .184 MACH = 1.3942 0 = 599.51 P = 440.65 RN/L = 2.9096

SECTION 1 (VERTICAL)

DEPENDENT VARIABLE CP

Z/BY .1520 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6944 .5058 .3314 .2430 .1939

.225 .1006 .0173 .1460 .1560 .2073

.050 .2205 .1518 .1531 .1662 .1624

.150 .2745 .0613 .0252 .0335 .0362

.300 .0734 .0334 .0545 .0526 .0601

.520 .1158 .1215 .1167 .0599 .1128

.655 .4395 .4746 .4981 .4270 .4471 .4572

.775 .3336 .4724 .4612 .4432 .4532 .4562

.900 .4531 .4531 .4531 .4518 .4530 .4670

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

(XEBV23)

ALPHA (deg) = 15.861 BETA (deg) = 4.289 MACH = 1.3942 Q = 599.51 P = 440.65 RNL = 2.9056

SECTION 11: VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CP	.7659	.5305		.2898		.1644	.1289
.100	.1263	.1585		.3626		.4559	.5143
.125	.2576	.1183		.3928		.4635	.5117
.150	.6737	.3693		.2068		.2748	.3571
.175	.0783	.3739		.1625		.1866	.2163
.200	.1457	.1759		.1763		.1775	.1626
.225	.4277	.5007		.5178		.4481	.4609
.250	.3733	.4941		.4669		.4735	.4528
.275	.4744	.4934		.4635		.4847	.4645

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DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-07310A148) - 140A/B/C/R ORB VERTICAL

PAGE 6705

(XEBV24) (13 AUG 75)

REFERENCE DATA

A _{EF}	2510.0000 IN.	X _{RP}	=	1076.6800 IN.	X _O
B _{EF}	4.54.8000 IN.	Y _{RP}	=	.0000 IN.	Y _O
C _{EF}	9.35.0580 IN.	Z _{RP}	=	375.0000 IN.	Z _O
SCALE	.0300				

ALPHA (1) = -3.982 BETA (1) = -3.644 MACH = 1.2469

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z / CV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
	.200	.7611	.6239	.6062	.6229	.5940	
	.225	.5914	.4607	.4211	.4250	.3950	
	.250	.5952	.4634	.4114	.4169	.3933	
	.275	.4789	.3557	.3417	.3398	.3102	
	.300	.3630	.2795	.2730	.2768	.2282	
	.325	.1805	.1359	.0934	.1517	.0327	
	.350	.2915	.1472	.1768	.4359	.4916	
	.375	.3416	.4302	.4254	.4202	.4518	
	.400	.3554	.4056	.3935	.4275	.4687	
						.5044	
						.4896	

ALPHA (1) = -3.977 BETA (2) = -190 MACH = 1.2469	0						
SECTION (1) VERTICAL DEPENDENT VARIABLE CP							
Z / CV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
	.000	.8122	.6915	.6658	.6312	.5679	
	.025	.2786	.0874	-.0560	-.0673	-.1162	
	.050	.4349	.2922	.0229	-.0139	-.0614	
	.075	.5757	.2147	.1677	.1682	.1738	
	.100	.2220	.1473	.1445	.1599	.1355	
	.125	.6623	.0459	.0324	.0804	.0100	
	.150	.4198	.5058	-.1695	-.4712	-.5105	
	.175	.3631	.4253	-.4962	-.4861	-.4948	
	.200	.4162	.4727	-.4588	-.4871	-.5033	

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -14DA/B/C/R ORB VERTICAL

ALPHA (1) = -3.980 BETA (3) = 4.277 MACH = 1.2469 Q = 599.78 P = 551.11 RN/L = 3.0086

SECTION 1: VERTICAL

Z:BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
X/CY

X/CY	1.00	.7493	.6191	.5711	.4989	.4298
.025	.0737	-.1681	-.3643	-.6031	-.6842	
.050	.1045	-.1575	-.3997	-.5971	-.6006	
.075	.2243	.0016	-.1191	-.3536	-.4893	
.100	.1416	.0229	-.0987	-.0578	-.0638	
.125	.0240	-.0535	-.0763	-.0730	-.0476	
.150	.4561	-.5489	-.1784	-.5066	-.5236	-.5019
.175	.3307	-.5190	-.5339	-.5068	-.5373	-.5134
.200	.4517	-.5234	-.5192	-.5218	-.5107	-.5026

ALPHA (2) = .038 BETA (1) = -3.875 MACH = 1.2468 Q = 599.96 P = 551.34 RN/L = 3.0225

SECTION 1: VERTICAL

Z:BV .1560 .3170 .4590 .6020 .6970 .8390 .9250
X/CY

X/CY	1.00	.6933	.5543	.5218	.5206	.5083
.025	.5254	.3261	.2267	.3403	.3321	
.050	.5258	.3560	.3277	.3343	.3274	
.075	.4143	.2673	.2616	.2661	.2463	
.100	.2535	.2655	.1970	.2124	.1679	
.125	.0890	.0669	.0409	.1036	.0116	
.150	.4711	.5035	.1611	.4497	.4938	.5381
.175	.3337	.4572	.4474	.4863	.4838	.5238
.200	.3636	.4395	.4335	.4497	.4945	.5160

ALPHA (2) = -2.42 BETA (2) = .150 MACH = 1.2468 Q = 599.96 P = 551.34 RN/L = 3.0225

SECTION 1: VERTICAL

Z:BV .1560 .3170 .4590 .6020 .6970 .8390 .9250
X/CY

X/CY	1.00	.7590	.6259	.5815	.5378	.4586
.025	.4326	.3276	-.0912	-.1057	-.1765	
.050	.3739	.2250	-.0400	-.0931	-.1272	
.075	.3258	.1519	.1017	.0987	.1082	
.100	.5462	.5866	.0782	.0901	.0755	
.125	.0614	.0164	.0191	.0443	.0371	
.150	.4451	.4267	-.1515	-.4915	-.5224	-.5338
.175	.3635	.4173	-.5162	-.5038	-.5131	-.5316
.200	.3636	.4269	-.5036	-.4929	-.5105	-.5095

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

SECTION 1 INVERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.6556	.9253
X/CY	.6780	.5515		.4955		.4148	.3273
	-.0187	-.2010		-.3950		-.6027	-.6932
	.0156	-.1986		-.4427		-.6105	-.6244
	.150	-.1381	-.0740	-.1781		-.3461	-.4936
	.300	-.0917	-.0183	-.1413		-.1154	-.1001
	.522	-.0744	-.1093	-.1183		-.1164	-.0924
	.685	-.4752	-.5785	-.1588	-.5915	-.5387	-.5243
	.775	-.3934	-.5518	-.5541	-.5313	-.5569	-.5335
	.350	-.4411	-.5556	-.5479	-.5469	-.5389	-.5291

ALPHA (2) = 3.904 BETA (1) = -3.872 MACH = 1.2475 0 = 600.37 P = 551.11 RNL = 3.0117

SECTION 1 INVERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.6390	.9250
X/CY	.6247	.4972		.4456		.4295	.4154
	.025	.2853	.3040	.2552		.2690	.2618
	.050	-.4170	.3153	.2531		.2616	.2609
	.150	.3230	.2230	.1903		.1979	.1847
	.350	-.1927		.1298		.1516	.1060
	.520	.0336	.0161	-.0079		.0587	-.0502
	.685	-.4940	-.5268	-.1698	-.5778	-.4661	-.5498
	.775	-.3545	-.4372	-.4796	-.4716	-.5055	-.5381
	.350	-.4120	-.4765	-.4618	-.4690	-.5105	-.5348

ALPHA (3) = 3.905 BETA (2) = -.92 MACH = 1.2475 0 = 600.37 P = 551.11 RNL = 3.0117

SECTION 1 INVERTICAL DEPENDENT VARIABLE CP

Z/BV	.1592	.3170	.4590	.6020	.6970	.6390	.9250
X/CY	.7034	.5579		.4989		.4422	.3485
	.025	.1665	-.0067	-.1315		-.1467	-.2211
	.050	-.3396	.1810	-.1033		-.1346	-.1697
	.150	.2751	.0961	.0402		.0400	.0459
	.300	-.1093	.0222	.0165		.0302	.0167
	.520	-.0498	-.0730	-.0695	-.6003	-.0041	-.0807
	.685	-.4804	-.5507	-.5266	-.5055	-.5430	-.5557
	.775	-.3548	-.5393	-.5247	-.5394	-.5354	-.5512
	.350	-.4219	-.5319	-.5173	-.5301	-.5462	-.5367

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

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ALPHA (3) = 3.915 BETA (3) = 4.245 MACH = 1.2475 Q = 600.37 P = 551.11 RN/L = 3.0117

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

Y/CV DEPENDENT VARIABLE CP

.390	.6120	.4955	.4157	.3278	.2286
.325	-.4619	-.2413	-.4303	-.5976	-.7003
.053	.0275	-.2261	-.4712	-.6104	-.6390
.160	.1112	-.1079	-.2244	-.3664	-.4935
.200	.0844	-.5569	-.1578	-.1579	-.1481
.192	-.1554	-.693	-.1621	-.1488	-.1543
.685	-.7323	-.6118	-.1727	-.5684	-.5595
.775	-.3755	-.5121	-.5799	-.5563	-.5557
.900	-.7463	-.5747	-.5717	-.5727	-.5598

ALPHA (1) = 7.877 BETA (1) = -3.867 MACH = 1.2474 Q = 600.25 P = 551.11 RN/L = 3.0132

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

Y/CV DEPENDENT VARIABLE CP

.390	.6118	.4574	.3755	.3371	.3254
.325	.3334	.2444	.1818	.2012	.1975
.053	-.3912	.2615	.1832	.1982	.2020
.160	.2632	.1846	.1312	.1395	.1305
.200	.1175	.0587	.0713	.0982	.0548
.192	-.0631	-.0322	-.0500	.0094	-.0905
.685	-.5321	-.5321	-.1860	-.4850	-.5152
.775	-.5392	-.5263	-.4950	-.4935	-.5216
.900	-.4836	-.4836	-.5003	-.4853	-.4872

ALPHA (2) = 7.692 BETA (2) = .178 MACH = 1.2474 Q = 600.25 P = 551.11 RN/L = 3.0132

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

Y/CV DEPENDENT VARIABLE CP

.390	.6856	.4908	.4171	.3479	.2637
.325	-.1537	-.5259	-.1557	-.1685	-.2335
.053	.3254	-.1484	-.1339	-.1688	-.1818
.160	.2421	.0537	-.0079	-.0115	-.0086
.200	.0653	-.3352	-.0349	-.0214	-.0338
.192	-.1660	-.1152	-.1138	-.0475	-.1209
.685	-.4587	-.5452	-.5137	-.5544	-.5731
.775	-.5712	-.5427	-.5350	-.5589	-.5473
.900	-.5347	-.5497	-.5347	-.5428	-.5631

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TABULATED PRESSURE DATA - ORA14B (AMES 11-073-1)

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ALPHA (4) = 7.632		BETA (3) = 4.244	MACH = 1.2474	0 = 600.25	P = 551.11	RNL = 3.0132
SECTION : INVERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
V/CV						(XEBV24)
1.000	.6373	.4600	.3399	.2420	.1515	
.025	.0775	-.2465	-.4525	-.5894	-.6720	
.150	.1282	-.2187	-.4972	-.5808	-.6427	
.275	.1690	-.0837	-.2563	-.3941	-.4529	
.400	.0269	-.1235	-.1846	-.2017	-.1980	
.525	.1957	-.2242	-.1993	-.1684	-.1891	
.650	.4244	-.6284	-.1910	-.6511	-.5789	
.775	.3578	-.6279	-.6017	-.5679	-.5833	
.900	.4327	-.5841	-.5127	-.5955	-.5719	
ALPHAS 51 = 11.916	BETA (11) = -3.850	MACH = 1.2463	0 = 600.28	P = 552.03	RNL = 3.0160	
SECTION : INVERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1592	.3170	.4590	.6020	.6370	.8390 .9250
V/CV						
1.000	.6373	.3144	.2530	.2424		
.025	.1925	.1310	.1435	.1401		
.150	.2125	.1310	.1374	.1454		
.275	.1113	.0753	.0845	.0807		
.400	.6347	.0592	.0530	.0136		
.525	.6232	.0792	.1282			
.650	.6232	-.6099	-.6004	-.1282		
.775	.6232	-.5070	-.5217	-.5310		
.900	.6232	-.5151	-.4344	-.4940	-.5644	
ALPHAS 51 = 11.924	BETA (21) = .186	MACH = 1.2463	0 = 600.28	P = 552.05	RNL = 3.0160	
SECTION : INVERTICAL		DEPENDENT VARIABLE CP				
Z/BV	.1592	.3170	.4590	.6020	.6370	.8390 .9250
V/CV						
1.000	.6373	.3031	.2672	.1948		
.025	.1925	.1664	.2056	.2603		
.150	.2125	.1746	.2073			
.275	.1113	.0536	.0593	-.0594		
.400	.6347	-.0845	.0714	-.0825		
.525	.6232	-.1555	.0925	-.1632		
.650	.6232	-.6205	-.5468	-.5814	-.5617	
.775	.6232	-.5645	-.5732	-.5631	-.5674	
.900	.6232	-.5591	-.5618	-.5750	-.5607	

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1481LATED PRESSURE DATA - OAIW8 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

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(XEBN24)

(XEBN24)

ALPHA (DEG) = 11.922 BETA (DEG) = 4.256 MACH = 1.2463 0 = 600.28 P = 532.05 RNL = 3.0160

SECTION 11 VERTICAL

DEPENTENT VARIABLE CP

Z SV	1580	.3170	.4590	.6020	.6970	.8390	.9250
A. CV	.653	.4224		.2746		.1655	.0903
	.620			.4600		.5829	.6741
	.625	.0624	.2463			.5803	.6517
	.651		.2236	.5027			
	.1219			.2802		.3362	
	.150			.2079		.2465	.4045
	.150			.2257		.2316	.2581
	.150			.1939		.2176	
	.150			.6588		.5838	
	.150			.5793		.6017	
	.150			.6028		.5838	
	.150			.6028		.5929	
	.150			.6092		.5950	
	.150			.5783			
	.150						

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

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REFERENCE DATA

	X	Y	Z	P	M	R	SPDRK	SPDFAP	R-ELVN	L-ELVN	MACH	ANGLE
REF. P.	.1580	.3170	.4590	.6020	.6970	.8390	.9250					
SECTION 1 INVERTICAL												
ALPHA = -3.989	BETA = 11 = -3.842	MACH = 1.0978	Q = 0	P = 600.10	R = 711.43	ANGLE = 3.1681						
X-CG	6.931	5.449	5.364	.5506	.5157							
1.65	-5.225	-3.578	-3.08	-3299	-2853							
1.65	-5.110	-3.584	-3276	-3186	-2872							
1.65	-3.737	-2.754	.2572	.2330	.2066							
1.65	2.262	1.879	.1752	.1664	.0977							
1.65	-1.554	-1.2289	-.0409	-.0033	-.1230							
1.65	-1.4239	-1.6635	-.2015	-.5706	-.7189							
1.65	-1.3655	-1.5167	-.6282	-.6069	-.6423							
1.65	-1.4149	-1.4149	-.5706	-.5815	-.6234							
ALPHA = -3.982	BETA = 12 = .191	MACH = 1.0978	Q = 0	P = 600.10	R = 711.43	ANGLE = 3.1681						
SECTION 1 INVERTICAL												
2-B	.1580	.3170	.4590	.6020	.6970	.8390	.9250					
X-CG	7.418	6.151	.6034	.5725	.4972							
1.65	-1.717	-2.228	-.1442	-.1632	-.2446							
1.65	-1.935	-1.935	-.0227	-.0419	-.1800							
1.65	-3.552	-1.175	.0759	.0661	.0590							
1.65	-2.763	-1.175	.0540	.0419	.0144							
1.65	-1.144	-3.519	.0759	.0661	.0590							
1.65	-1.351	-1.351	-.0551	-.0504	-.1438							
1.65	-1.351	-1.351	-.2051	-.7043	-.7343							
1.65	-1.4217	-1.7044	-.7769	-.6905	-.7269							
1.65	-1.2517	-1.6539	-.6899	-.6739	-.7055							
1.65	-1.4235	-1.4235	-.6377	-.6537	-.6895							
1.65	-1.4235	-1.4235	-.6377	-.6537	-.6895							

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C ORB VERTICAL
 $\beta_{1-3} = .355$ $\beta_{1-3} = 4.249$ MACH = 1.0980 0 = 599.15 P = 710.01 RN/L = 3.1813

SECTION 1, (1) EXPERIMENTAL

2/9. .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

$\delta/\delta C_V$	.6228	.4707	.4152	.3251	.2604
.050	-.3574	-.5416	-.7828	-.8377	
.050	-.3213	-.5777	-.7937	-.8059	
.143	-.1328	-.2938	-.4638	-.5439	
.143	-.1359	-.2629	-.4200	-.5177	
.143	-.2203	-.2349	-.2681	-.2416	
.143	-.1810	-.7392	-.7573	-.7214	
.143	-.7557	-.7266	-.7616	-.7148	-.7431
.143	-.5580	-.7438	-.7476	-.7338	-.7259
.143	-.4621				

 $\beta_{1-3} = 2.948$ $\beta_{1-3} = -3.871$ MACH = 1.0978 0 = 599.38 P = 710.48 RN/L = 3.1840

SECTION 1, (1) EXPERIMENTAL

2/10. .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

$\delta/\delta C_V$	.5712	.331	.3733	.636	.3400
.050	-.1755	-.1724	-.1372	.1686	
.050	-.1059	-.1013	-.1013	.0794	
.050	-.0534	-.0434	-.0434	.0043	
.050	-.1391	-.0770	-.0770	-.2032	
.050	-.1949	-.5777	-.7711		
.050	-.4551	-.6321	-.7053	-.7492	
.050	-.1354	-.6506	-.7120	-.7315	
.050	-.177	MACH = 1.0978	0 = 599.38	P = 710.48	RN/L = 3.1840

SECTION 1, (1) EXPERIMENTAL

2/11. .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

$\delta/\delta C_V$	.5712	.331	.3733	.636	.3400
.050	-.3321	-.3012	-.3012		
.050	-.2435	-.2471	-.2471		
.050	-.0459	-.0375	-.0375		
.050	-.0561	-.0847	-.0847		
.050	-.1227	-.1376	-.1376	-.2223	
.050	-.2112	-.1295	-.1295	-.7684	
.050	-.1732	-.1732	-.1732	-.7610	
.050	-.115	-.7479	-.7479	-.7285	

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(XEBV25)

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

ALPHA (3) = 3.950 BETA (3) = 4.239 MACH = 1.0978 Q = 599.38 P = 710.48 RNL = 3.1840
 SECTION 1: VERTICAL
 DEPENDENT VARIABLE CP

Z/B: .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/C:

.050	.5849	.4287	.3420	.2426	.1526
.025	-.1036	-.3746	-.5630	-.7788	-.8668
.050	-.0473	-.3395	-.6132	-.7592	-.8199
.150	.0336	-.1829	-.3729	-.4980	-.5264
.350	-.0645	-.1772	-.2796	-.2730	-.2692
.550	-.2591	-.2695	-.4739	-.2796	-.3103
.695	-.1470	-.1718	-.8401	-.7847	-.7535
.775	-.3613	-.5029	-.7623	-.7476	-.7653
.900	-.4649	-.4649	-.5403	-.7416	-.7704

ALPHA (1) = 7.932 BETA (1) = -3.857 MACH = 1.0986 Q = 599.84 P = 710.01 RNL = 3.1812
 SECTION 1: VERTICAL
 DEPENDENT VARIABLE CP

Z/B: .1580 .3170 .4590 .6020 .6970 .8390 .9250

Y/C:

.000	.6075	.2764	.2956	.2692	.2463
.025	.3377	.1514	.0955	.1295	.1264
.150	.3595	.1051	.0938	.1207	.1153
.350	.2161	.0626	.0351	.0512	.0355
.550	.0192	-.0290	-.0075	-.0015	-.0360
.750	-.1235	-.1239	-.1694	-.1235	-.2315
.875	-.5256	-.7216	-.1645	-.8072	-.6853
.975	-.3684	-.5747	-.6528	-.6648	-.7071
.900	-.4316	-.4316	-.5913	-.6548	-.6522

ALPHA (1) = 7.938 BETA (2) = -.185 MACH = 1.0986 Q = 599.84 P = 710.01 RNL = 3.1812
 SECTION 1: VERTICAL
 DEPENDENT VARIABLE CP

Z/B: .1580 .3170 .4590 .6020 .6970 .8390 .9250

Y/C:

.000	.6418	-.264	.3574	.2943	.2003
.025	.1280	-.1131	-.2732	-.2995	-.3548
.150	.2615	.0522	-.2103	-.2931	-.3062
.150	.1548	-.5458	-.1048	-.1102	-.1032
.250	-.0411	-.1263	-.1290	-.1138	-.1332
.520	-.2014	-.2194	-.2338	-.1807	-.2645
.535	-.4759	-.7577	-.1538	-.8272	-.7339
.775	-.3280	-.5220	-.7424	-.7292	-.7513
.820	-.4493	-.4493	-.5489	-.7249	-.7363

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL SECTION 1 INVERTICAL						
Z/BV	X/CY	ALPHA (4) = 7.937	BETA (3) = 4.238	MACH = 1.0986	Q = 599.84	P = 710.01
.000	.5955	.3768	.2605	.1584	.0458	(XE8V25)
.025	-.0402	-.3827	-.5918	-.7604	-.8673	
.050	.0198	-.3296	-.6345	-.7350	-.8383	
.150	.0622	-.1595	-.4102	-.4619	-.4622	
.300	-.1331	-.2357	-.2927	-.3402	-.3321	
.520	-.3135	-.3379	-.3164	-.3228		
.695	-.4488	-.7205	-.1675	-.8620	-.7877	
.775	-.3894	-.5173	-.7141	-.7779	-.7825	
.900	-.5031	-.5385	-.5790	-.7017	-.7737	
ALPHA (5) = 11.970	BETA (1) = -3.845	MACH = 1.0981	Q = 599.46	P = 710.25	RNL = 3.1817	
SECTION 1 INVERTICAL						
Z/BV	X/CY		DEPENDENT VARIABLE CP			
.000	.6424	.3599	.2269	.1758	.1569	
.025	.1890	.0905	.0559	.0856	.0943	
.050	.2930	.1156	.0589	.0773	.0826	
.150	.1454	.0162	.0034	.0043	.0088	
.300	-.0515	-.0759	-.0479	-.0378	-.0483	
.520	-.1595	-.1490	-.2039	-.1405	-.2499	
.625	-.5248	-.7271	-.1854	-.8202	-.6818	
.775	-.4083	-.6530	-.6553	-.6761	-.6879	
.900	-.4534	-.4539	-.6539	-.6923	-.6280	
ALPHA (5) = 11.981	BETA (2) = .187	MACH = 1.0981	Q = 599.46	P = 710.25	RNL = 3.1817	
SECTION 1 INVERTICAL						
Z/BV	X/CY		DEPENDENT VARIABLE CP			
.000	.6279	.3919	.2889	.2059	.1012	
.025	.0992	-.1845	-.3138	-.3309	-.3885	
.050	.2311	.0123	-.2576	-.3392	-.3469	
.150	-.1300	-.0840	-.1576	-.1673	-.1577	
.320	-.0759	-.1672	-.1830	-.1700	-.1813	
.520	-.2553	-.2543	-.2709	-.2228	-.3005	
.695	-.4983	-.1105	-.1646	-.7461	-.7925	
.775	-.4033	-.5453	-.7573	-.7492	-.7700	
.900	-.4433	-.4433	-.5402	-.7326	-.7499	

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(OAI4B) - 140A/B/C/R ORB VERTICAL

(XEV25)

ALPHA (5) = 11.975 PETA (3) = 4.250 MACH = 1.0981 0 = 599.46 P = 710.25 RVL = 3.1817

STRUCTURE: 1. AERODYNAMICAL

DEPENDENT VARIABLE CP

Z / BY	-1580	-3170	.4590	.6020	.6970	.8390	.9250
X / CV	.6239	.3524					
	.020	-.4097					
.025	-.0160						
.050	.0711	-.3504					
.150	.0575	-.2222					
.300	-.1650	-.2771					
.520	-.2535	-.3766					
.685	-.5197	-.7003					
.775	-.2375	-.5223					
.230	-.5359	-.5599					
			-.5647				
				-.6200			
					-.7898		
						-.7812	

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-07310A14B) - 140AV/B/C/R ORB VERTICAL

(13 AUG 75)

REFERENCE DATA

	X, Y, Z	ANGLE OF INC.	BETA (1)	BETA (2)	MACH	P	RN/L	PARAMETRIC DATA
REF	14000.0000 SQ.FT.	XMAP = 1076.6800 IN. X0 YMAP = 0000 IN. Y0 ZMAP = 375.0000 IN. Z0						RUDER = .000 BDFLAP = .000 R-ELVN = .000 MACH = .900
REF	.0000 IN.							
REF	.935.0580 IN.							
SCALE	.0300							
ALPHA (1)	= -3.986							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.1834 .3547		.3658		.4087	.3561		
150	.3479 .2130		.2302		.2252	.1595		
152	.3264 .2229		.2059		.1976	.1578		
155	.1872 .1113		.0116		.0840	.0441		
158	.0424 .0149		.0117		.0162	.1021		
160	.1692 .1716		.2387		.2813	.3256		
164	.5120 -.5120		.2030 -1.0310	-1.0912	.7182	.5296		
165	.3193 -.3271		.4383 -.4443	-.5181	.6066	.3003		
167	.2139 -.2439		.2171 -.2342	-.2749	.2709	.1317		
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977							
SECTION : 11 VERTICAL								
Z, B/A	.1580 .3170	.4590	.6020	.6970	.8390	.9250		
X, C/V	.5431 .4537		.4943		.4799	.4020		
150	.1550 .2563		.3425		.3316	.4490		
152	.1512 .1963		.0409		.1072	.3167		
155	.1532 .1332		.0798					
158	.1219 .1333		.1136					
160	.1219 -.2544		.2797					
163	.1252 -.4535		.2119					
165	.3224 -.5264		.7845 -.4542					
167	.2555 -.5265		.5264 -.4542					
ALPHA (1)	= -3.977					</td		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

ALPHA (1) = -3.985 BETA (3) = 4.276 MACH = .89940 0 = 599.79 P = 1059.2 RNL = 3.5659

SECTION (1) VERTICAL

Z/BY .1583 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.4991	.3287	.3129	.2056	.1510
.025	-.2040	-.6979	-.9045	-.9304	-.9096
.050	-.1287	-.6081	-.8348	-.9112	-.9577
.150	-.1535	-.3483	-.5189	-.7529	-.7976
.250	-.2573	-.7553	-.4541	-.5438	-.5410
.520	-.4135	-.4412	-.4714	-.4622	-.4236
.690	-.4225	-.4443	-.2103	-.6157	-.2895
.750	-.2374	-.2537	-.5594	-.4560	-.1966
.900	-.5655	-.1654	-.2422	-.2021	-.1158

ALPHA (2) = .061 BETA (1) = -3.869 MACH = .89877 0 = 599.18 P = 1059.7 RNL = 3.5651

SECTION (1) VERTICAL

Z/BY .1583 .3170 .4590 .6020 .6970 .8390 .9250					
X/CY					
.000	.4241	.2749	.2763	.3342	.2746
.025	-.2617	-.1155	-.1988	-.2062	-.1524
.050	-.2649	-.1497	-.1759	-.1709	-.1303
.150	-.1275	-.6333	-.0756	-.0647	-.0202
.250	-.0592	-.0127	-.0109	-.3015	-.1180
.520	-.1905	-.1831	-.2459	-.3019	-.3906
.690	-.2627	-.4653	-.1793	-.7767	-.7574
.750	-.2049	-.2652	-.4406	-.3940	-.5368
.900	-.2359	-.2196	-.2501	-.1703	-.2032

ALPHA (2) = .067 BETA (2) = -.174 MACH = .89877 0 = 599.18 P = 1059.7 RNL = 3.5651

SECTION (1) VERTICAL

Z/BY .1583 .3170 .4590 .6020 .6970 .8390 .9250					
X/CY					
.000	.5072	.3590	.4249	.4076	.3199
.025	-.0240	-.3345	-.3660	-.3452	-.4570
.050	-.0974	-.0276	-.0824	-.1472	-.2883
.150	-.0181	-.1435	-.1138	-.1346	-.1198
.250	-.1845	-.1759	-.1448	-.1467	-.2050
.520	-.3069	-.2900	-.3035	-.3571	-.3778
.690	-.2518	-.4662	-.1866	-.7182	-.5166
.750	-.2405	-.2014	-.5197	-.5552	-.3915
.900	-.1750	-.1819	-.2578	-.2823	-.2313

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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AMES 11-073(OAI48) -140A/B/C/R ORB VERTICAL

(XEBV26)

SECTION 1 :VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .4121 -.2641 .2225 .1303 .0741

.025 -.2877 -.7391 -.9068 -.8032 -.0729

.050 -.1964 -.6539 -.8543 -.7839 -.6769

.150 -.1510 -.3822 -.5932 -.5753 -.6769

.300 -.3573 -.4014 -.5024 -.6319 -.6490

.520 -.4593 -.4311 -.4047 -.4819 -.4878

.595 -.3101 -.3775 -.1908 -.6148 -.4818

.775 -.2014 -.2861 -.4193 -.4128 -.4653

.900 -.2631 -.1603 -.1831 -.2217 -.2217

-.1125 -.1125 -.1405

ALPHA (3) = 3.954 BETA (1) = -3.877 MACH = .89787

SECTION 1 :VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1550 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .3685 .2235 .1856 .2566 .1924

.325 .2155 .1149 .1967 .1761 .1283

.350 .2050 .1120 .1609 .1530 .1018

.152 .0699 .0254 .0631 .0407 -.0050

.350 -.0734 -.0438 -.0231 -.0509 -.1453

.520 -.1333 -.1919 -.2505 -.3240 -.3240

.655 -.2768 -.4401 -.1605 -.6367 -.7253

.775 -.1994 -.2692 -.4348 -.3670 -.3765

.900 -.2279 -.2217 -.2217 -.1943 -.1324

-.1365 -.0744

ALPHA (3) = 3.955 BETA (2) = .185 MACH = .89787

SECTION 1 :VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .4775 .3143 .3654 .3501 .2464

.025 -.0693 -.3664 -.3537 -.3442 -.4486

.050 .0455 .1465 .0991 -.1604 -.2836

.150 -.0622 -.1737 .1211 -.1509 -.1313

.350 -.2147 -.1653 -.1476 -.1621 -.2153

.520 -.3045 -.2902 -.3155 -.3828 -.3866

.625 -.2797 -.4621 -.6462 -.7230 -.5111

.775 -.2262 -.2275 -.4773 -.3661 -.5264

-.2355 -.1675 -.2077 -.1581 -.3184 -.2014

-.1619 -.0654

RNL = 1059.7

RNL = 1060.5

RNL = 1060.5

RNL = 1060.5

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

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AMES 11-073(04148) - 140A/B/C/R ORB VERTICAL							(XE8V26)				
ALPHA (4) =	7.933	BETA (3) =	4 243	MACH =	.99930	Q =	600.20	P =	1060.2	RNL =	3.5747
DEPENDENT VARIABLE CP											
Z / BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
* CV											
A. PHA + 51 = 11.953	BETA (1) = -3.854	MACH = .99937	Q = .89857	P = 1060.2	RNL = 3.5673						
SECTION 1) VERTICAL											
Z / BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
* CV											
A. PHA + 51 = 11.965	BETA (2) = 189 MACH = .89857	Q = .89857	P = 1060.2	RNL = 3.5673							
SECTION 1) VERTICAL											
Z / BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
* CV											

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REGULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

ALPHA (E) =	11.319	BETA (3) =	4.257	MACH =	.89857	Q =	599.22	P =	1060.2	R/M ₁ =	3.5673
CONDITION : VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9650	DEPENDENT VARIABLE CP			
A. CA											
-0.050	-3.223	-1.328	-0.0150	-1.053	-2.164						
-0.025	-1.1312	-6.225	-0.8957	-0.6817	-0.8215						
0.025	-1.0545	-5.711	-0.6589	-0.6751	-0.8101						
0.050	-1.1754	-7.364	-0.6171	-0.6908	-0.8008						
0.100	-1.3217	-4.205	-0.4254	-0.6470	-0.5870						
0.150	-1.4345	-4.936	-0.3574	-0.4822	-0.3155						
0.200	-1.2833	-3.236	-1.090	-0.5236	-0.763	-0.2514	-0.1957				
0.250	-1.2132	-3.118	-0.3153	-0.2224	-0.2228	-0.1646	-0.1250				
0.300	-1.276	-2.6	-0.2244	-0.1688	-0.1022	-0.0531	-0.0189				

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(XEBV26)

PRESSURE DATA - QAHB (AMES 11-073-1)

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DATA

PROPELLER DATA							PROPELLER DRIVELINE DATA		
L-692	63.00	S2.FT.	XMAP	=	1076	6800	IN.	XO	.000
L-692	63.00	S2.FT.	XMAP	=	1076	6800	IN.	XO	.000
L-692	63.00	S2.FT.	XMAP	=	1076	6800	IN.	XO	.000
L-692	63.00	S2.FT.	XMAP	=	1076	6800	IN.	XO	.000

3PEF = 938.0681 IN. 28
SCFE = 5320

卷之三

$E_{\text{PMA}} = -3.330$ $\text{ETA} = -7.853$ $\text{MACH} = .59858$ $\text{P} = .59436$ $\text{MN/L} = 2386.3$

SECTION I / LIVESTOCK

:6970 8390 :9250

-.0672 -.0250
-.0672 -.0250

5820 · 2160 · 0822 ·

1838 - 1918 - 1975 - 1993 - 1998 - 2003

4451 - 9551 - 0241 -

-0.933	-0.1158	-0.1438
-0.933	-0.1158	-0.1438
-0.933	-0.1158	-0.1438
-0.933	-0.1158	-0.1438
-0.933	-0.1158	-0.1438

.59658 = MACH 1

DEPENDENT VARIABLE CP
SECTION 1 VERTICAL

• 9526

• 3807 • 3808 • 3809

1621. 1622. 1623. 1624. 1625. 1626. 1627. 1628. 1629. 1630.

6240 - 9400 - 1460:

- 254.8 - 252.0 - 252.1 - 252.5 - 253.1 - 253.5 - 254.0

- 121 -

0450-00250-0550-04420-04011-03211-03211-

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TASULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL
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PLANE 1 (2) = .056 BETA 1 (4) = 4.247 MACH = .59638 0 = 594.21 P = 2386.5 RNL = 4.8456
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.851 -.6011 -.5502 -.1.0549
.652 -.5393 -.5277 -.9964
.595 -.4549 -.4725 -.3952
.5385 -.3777 -.3359 -.2863
.4825 -.4175 -.3679 -.3186
.4325 -.4333 -.3155 -.2816
.3875 -.2445 -.2433 -.1913 -.1427
.3425 -.1744 -.1747 -.0529 -.0341
2.000 CEO BETA 1 (5) = 8.305 MACH = .59638 0 = 594.21 P = 2386.5 RNL = 4.8456
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

* CP
1.000 1.313 .1354 .0314 .0251
.850 -.6020 .6970 .8390 .9250
2.000 CEO BETA 1 (5) = 7.897 MACH = .59608 0 = 593.49 P = 2386.0 RNL = 4.8432
DEPENDENT VARIABLE CP

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(DA14B) -140A/B/C/R ORB VERTICAL

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ALPHA : 3) = 3.280 BETA (1) = 8.292 MACH = .59608 Q = 593.49 P = 2386.0 RNL = 4.8432
 SECTION : 1) VERTICAL
 Z/EV : .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000 -.1494 -.5823 -.4930 -.8104 -.8373 -.5146
 .255 -.6469 -.1146 -.8056 -.7913 -.8327 -.8709
 .500 -.6705 -.9501 -.2330 -.7609 -.8291 -.7930
 .750 -.8264 -.0230 -.4455 -.7490 -.7990 -.7367
 .100 -.4CC5 -.4455 -.3880 -.5756 -.4952 -.5866
 .125 -.3755 -.1256 -.1405 -.4423 -.3264 -.4057
 .150 -.2555 -.2539 -.2395 -.2909 -.2435 -.3397
 .175 -.2274 -.1956 -.1526 -.1614 -.1383 -.2739
 .200 -.1953

ALPHA : 4) = 7.936 BETA (1) = -7.885 MACH = .59590 Q = 593.13 P = 2386.0 RNL = 4.8429

SECTION : 1) VERTICAL
 Z/EV : .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000 -.1273 -.4434 -.4579 -.3307 -.3121 -.3519
 .250 -.3513 -.3065 -.2828 -.1697 -.3152 -.2624
 .500 -.2394 -.2643 -.2828 -.1697 -.2823 -.2254
 .750 -.1650 -.1450 -.0238 -.0671 -.1606 -.0984
 .100 -.0487 -.0258 -.1586 -.1635 -.0558 -.0227
 .125 -.1603 -.1603 -.1283 -.2173 -.1732 -.1681
 .150 -.2603 -.1744 -.1834 -.1766 -.1522 -.2318 -.2349
 .175 -.1738 -.1364 -.0971 -.0909 -.0929 -.0929

ALPHA : 4) = 7.944 BETA (2) = -3.857 MACH = .59590 Q = 593.13 P = 2386.0 RNL = 4.8429

SECTION : 1) VERTICAL
 Z/EV : .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000 -.2449 .0718 .0452 .1526 .0829
 .250 -.746 .1427 .1641 .1730 .1456
 .500 -.537 .1217 .1454 .1455 .1221
 .750 -.3427 .0294 .0473 .0418 .0139
 .100 -.2545 -.0559 -.0240 -.0401 -.0826
 .125 -.2146 -.2468 -.2511 -.2427 -.2107
 .150 -.2362 -.3242 -.1176 -.3292 -.2557 -.2505
 .175 -.1668 -.2015 -.2028 -.1819 -.1550 -.1362 -.2367
 .200 -.1721 -.1338 -.0987 -.0755 -.0400 -.0357

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

ALPHA (4) = 8.045 BETA (3) = .182 MACH = .593.13 P = 2386.0 RN/L = 4.8429

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.3909	.3058	.3244	.3002	.2387
.025	-.0957	-.3578	-.3319	-.2537	-.4018
.050	-.0105	-.1152	-.1144	-.1254	-.1257
.150	-.0828	-.1378	-.1251	-.1249	-.1033
.300	-.1664	-.1714	-.1510	-.1396	-.1602
.520	-.2850	-.3082	-.3236	-.3113	-.2546
.685	-.2231	-.3375	-.1188	-.2987	-.3067
.775	-.1936	-.2055	-.2325	-.2102	-.1564
.900	-.1660	-.1660	-.1299	-.0968	-.1126

ALPHA (4) = 8.043 BETA (4) = 4.239 MACH = .59590 O = 593.13 P = 2386.0 RN/L = 4.8429

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.2265	.0351	.0099	-.0984	-.1641
.025	-.3853	-.6246	-.5979	-.5341	-.9708
.050	-.2534	-.6058	-.5353	-.5049	-.8736
.150	-.2620	-.3875	-.5175	-.4995	-.4513
.300	-.2800	-.2959	-.3544	-.3789	-.2513
.520	-.3254	-.3368	-.3708	-.3626	-.2674
.685	-.2294	-.2864	-.1206	-.3946	-.3022
.775	-.2001	-.2053	-.2418	-.2263	-.2353
.900	-.1970	-.1309	-.1309	-.1010	-.1351

ALPHA (4) = 8.041 BETA (5) = 8.297 MACH = .59590 O = 593.13 P = 2386.0 RN/L = 4.8429

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-.1979	-.6338	-.5355	-.6660	-.5716
.025	-.6718	-.10616	-.7767	-.8032	-.7284
.050	-.6936	-.9521	-.7642	-.7857	-.6699
.150	-.8570	-.10178	-.7561	-.8180	-.6782
.300	-.2956	-.3970	-.7996	-.8075	-.5707
.520	-.3133	-.3495	-.5502	-.4345	-.4348
.685	-.2115	-.2764	-.4026	-.3218	-.3254
.775	-.2051	-.2354	-.2558	-.2463	-.3650
.900	-.1252	-.1764	-.1364	-.1579	-.2959

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(XE8V27)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

ALPHA (5) = 11.909 BETA (1) = -7.850 MACH = .59646 Q = .594.33 P = .2386.5 RNL = 4.8458
 SECTION 1: VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.0550 -.1330 -.5449 -.5431 -.4032 -.4167
 .025 .2767 .2865 .2956 .2801 .2239
 .550 .2296 .2560 .2630 .2580 .1986
 .150 .0921 .1428 .1564 .1545 .0771
 .710 .0334 .0439 .0635 .0516 .0302
 .625 .1575 .1845 .1817 .1630 .1646
 .935 .2045 .2695 .1233 .2012 .2257
 .775 .1802 .1711 .1752 .2148 .1428
 .300 .1175 .1454 .1005 .0884 .0839 .1001

ALPHA (5) = 11.929 BETA (2) = -3.836 MACH = .59646 Q = .594.33 P = .2386.5 RNL = 4.8458
 SECTION 1: VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.0550 .2623 .2391 -.0047 .0954 .0112
 .025 .1558 .1226 .1722 .1615 .1281
 .550 .1484 .1097 .1261 .1332 .1031
 .150 .0208 .0159 .0331 .0381 .0047
 .710 .0937 .0553 .0323 .0359 .0862
 .625 .1620 .2341 .1077 .2216 .1968
 .935 .2224 .3112 .2414 .2449 .2334
 .775 .1634 .1932 .2013 .1762 .1488 .1310
 .300 .1660 .1377 .1077 .0865 .0720 .0412 .0312

ALPHA (3) = 11.930 BETA (3) = .181 MACH = .59646 Q = .594.33 P = .2386.5 RNL = 4.8458
 SECTION 1: VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.0550 .2749 .2826 .2510 .1911
 .025 .1552 .1556 .3223 .2595 .3848
 .550 .1479 .1499 .1236 .1129 .1421
 .150 .0245 .0255 .1314 .1255 .1135
 .710 .1814 .1832 .1575 .1348 .1556
 .625 .2070 .2030 .1171 .3168 .2916
 .935 .2335 .2350 .2242 .3620 .2814
 .775 .1636 .1616 .1266 .2084 .1688 .2344
 .300 .1376 .1360 .1229 .1229 .1420 .1025
 .1376 .1360 .1229 .1229 .0350 .0095

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

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ALPHA (5) = 11.930		BETA (4) = 4.251		MACH = .59646	O = 594.33	P = 2386.5	RNL = 4.6458
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			(XE8V27)
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.2143	.6801		.0505	-.1772	-.2436	
.025	-.7574	-1.0852		-.5975	-.5383	-.9012	
.050	-.7882	-.9770		-.5499	-.5085	-.7850	
.150	-.5233	-1.0712		-.5497	-.5473	-.5199	
.200	-.4698	-.4181		-.3271	-.3789	-.2182	
.520	-.4399	-.3234		-.1142	-.3702	-.3167	
.685	-.3148	-.2574		-.3768	-.3207	-.2823	
.775	-.1939	-.2110		-.2315	-.2189	-.2030	
.900	-.2205	-.1351		-.1050	-.0908	-.1582	
						-.0467	-.1373
ALPHA (5) = 11.920	BETA (5) = 8.317	MACH = .59646	O = 594.33	P = 2386.5	RNL = 4.6458		
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP					
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000							
.025							
.050							
.150							
.200							
.520							
.685							
.775							
.900							

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 1140A/B/C/R ORB VERTICAL

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(XEBV28) 13 AUG 75

REFERENCE DATA

ZREF = 2590.0000 SO.FT. XMRP = 1076.6800 IN. X0
 ZREF = 4.14+.8000 IN. YMRP = .0000 IN. Y0
 ZREF = 925.0620 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .0200

ALPHA (1) = -3.978 BETA (1) = -3.855 MACH = 1.3927

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.7851	.6762	.5464	.6523	.6391		
.250	.6933	.5148	.4628	.4703	.4611		
.500	.6231	.5158	.4533	.4614	.4611		
.750	.5221	.4180	.3975	.3960	.3801		
.100	.2914	.3297	.3278	.3590	.3240		
.125	.2195	.2152	.2702	.2856	.1439		
.150	.1989	.1936	.1569	.1609	.1354		
.175	.1347	.1777	.1146	.0745	.1257	.1517	.3637
.200	.1215	.1274	.0655	.0738	.0738	.1825	.3006
							.2740

ALPHA (1) = -3.971 BETA (1) = .185 MACH = 1.3927

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
V/CY							
.000	.8313	.7433	.7309	.6640	.6030		
.225	.2709	.1464	.0346	.0241	.0487		
.050	.4555	.3473	.0709	.0418	.0073		
.150	.1281	.2175	.2229	.2262	.2376		
.210	.2634	.2113	.2065	.2149	.2301		
.625	.1273	.1117	.1262	.2343	.1493		
.675	.3187	.1645	.1669	.1117	.3442		
.725	.3675	.1639	.1643	.1806	.1718	.3116	
.775	.2615	.2014	.1575	.1631	.2292	.2559	

P =

441.59

RNL =

2.9214

PARAMETRIC DATA

RUDDER = -10.000 SPDBRK = 35.000
 BDFLAP = 16.300 L-ELVN = 10.000
 R-ELVN = .000 MACH = 1.400

DATE 14 FEB 76

TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

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AMES 11-073(04148) - 140A/B/C/R ORB VERTICAL
(XEBV28)

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7634 .6692 .6063 .5540 .4301

.025 .0919 -.0721 -.3118 -.4821 -.5578

.050 .1120 -.0814 -.3104 -.4662 -.5997

.150 .2110 .0347 .0517 -.3374 -.3973

.200 .2095 .0973 -.0382 -.0398 -.1296

.470 .0210 -.0152 .1226 .0891

.655 -.3851 -.2553 .1472 .1941 .2142

.775 -.3718 -.2884 -.2456 .2064 .2161

.900 -.3349 -.2619 .2163 .2185 .2356

.900 -.369 -.069 BETA (1) = -3.876 MACH = 1.3934

.900 -.3170 .4590 .6020 .6970 .8390 .9250

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7131 .5906 .5755 .5554 .5464

.025 .5225 .4429 .3934 .3956 .3940

.050 .5432 .4426 .3857 .3887 .3929

.150 .4472 .3433 .3204 .3274 .3113

.300 .3119 .2560 .2616 .2914 .2685

.470 .1540 .1557 .2088 .2409 .1100

.655 -.2498 -.2282 -.1553 -.1262 -.1620

.775 -.3613 -.2148 -.1533 -.1083 -.1562

.900 -.2516 -.1677 -.1132 -.1092 -.1967

.900 -.2045 BETA (2) = -1.182 MACH = 1.3934

.900 -.3170 .4590 .6020 .6970 .8390 .9250

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7575 .6592 .6239 .5700 .4814

.025 .2077 .0920 -.0171 -.0176 -.0869

.050 .3944 .2931 .0155 -.0015 -.0432

.150 .3733 .2110 .1649 .1666 .1597

.300 .2250 .1493 .1432 .1529 .1581

.470 .0568 .0568 .0791 .1678 .1054

.655 -.2327 -.2656 -.1495 -.1850 -.1537

.775 -.3977 -.2715 -.2188 -.2151 -.2008

.900 -.3151 -.2396 -.1978 -.2030 -.2542

.900 -.2903 -.2903 -.2903 -.2903 -.2903

.900 -.2903 -.2903 -.2903 -.2903 -.2903

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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SECTION (1) VERTICAL
 $Z/B = .1580 \quad \text{BETA} (3) = 4.247 \quad \text{MACH} = 1.3934 \quad 0 = 600.11 \quad P = 441.59 \quad RNL = 2.9212$

X/CY
 $.000 .6919 .5976 .5335 .4798 .3551$
 $.025 -.0749 -.1359 -.3306 -.4838 -.5608$
 $.050 -.0397 -.1347 -.3422 -.4651 -.5148$
 $.100 -.1444 -.0252 -.0963 -.3434 -.3901$
 $.150 -.1500 .0432 -.0762 -.0084 -.1183$
 $.200 -.0021 -.0390 -.1473 -.0597 -.0566$
 $.225 -.4237 -.3265 -.2372 -.2372 -.0401$
 $.275 -.3937 -.3274 -.2754 -.2543 -.3519$
 $.300 -.3572 -.2975 -.2552 -.2562 -.2322$
 $.350 -.3618 -.2975 -.2552 -.2768 -.3372$

$\Delta P_{A1} (3) = 3.888 \quad \text{BETA} (1) = -3.879 \quad \text{MACH} = 1.3920 \quad C = 599.57 \quad P = 442.06 \quad RNL = 2.9184$

SECTION (INVERTICAL
 $Z/B = .1580 \quad \text{BETA} (3) = 4.247 \quad \text{MACH} = 1.3934 \quad 0 = 600.11 \quad P = 441.59 \quad RNL = 2.9212$

X/CY
 $.000 6223 5268 4982 4649 4527$
 $.025 3751 3619 3061 3157 3072$
 $.050 1163 3661 3053 3127 3154$
 $.100 3425 2718 2444 2552 2454$
 $.150 1838 1838 1903 2229 2013$
 $.200 10912 1560 1586 1872 0607$
 $.225 2499 1939 1550 1867 1758$
 $.250 3233 2084 1545 1503 2108$
 $.300 2687 2084 1545 1503 2172$
 $.350 2922 2674 21 = 1.79 \quad \text{MACH} = 1.3920 \quad C = 599.57 \quad P = 442.06 \quad RNL = 2.9184$

SECTION (INVERTICAL
 $Z/B = .1580 \quad \text{BETA} (3) = 4.247 \quad \text{MACH} = 1.3934 \quad 0 = 600.11 \quad P = 441.59 \quad RNL = 2.9212$

X/CY
 $.000 6715 5693 5370 4743 3917$
 $.025 4643 4643 -.0436 -.0586 -.1223$
 $.050 1546 1546 -.0311 -.0519 -.0758$
 $.100 1163 1163 -.1092 -.1092 -.1002$
 $.150 3233 3233 -.0659 -.0945 -.0842$
 $.200 2687 2687 -.0197 -.1137 -.0516$
 $.225 2922 2674 -.2531 -.2100 -.2070$
 $.250 3233 2674 -.2216 -.2624 -.2430$
 $.300 3572 2922 -.2320 -.2320 -.2799$
 $.350 3618 2975 -.2552 -.2768 -.3264$

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL
 SECTION 1: INERTIAL
 DEPENDENT VARIABLE CP

Z B1: .1580 .3173 .4590 .6020 .6970 .8390 .9250

X/C	5279	.4745	.3138	.2183	.1766
.025	.1083	.1543	.3620	.4568	.5276
.050	.1759	.1439	.3828	.4610	.5047
.075	.2201	.0304	.1917	.3037	.3687
.100	.3450	.0782	.1376	.1602	.1445
.125	.1141	.1633	.1680	.1116	.1121
.150	.1437	.2351	.1625	.3096	.3143
.175	.3697	.4933	.2658	.2479	.3268
.200	.4164	.3826	.3363	.3963	.3505
ALPHA = 61 = 15.854	BETA = 1 11 = -3.831	MACH = 1.3903	O	= 599.44	P = 443.00

SECTION 1: INERTIAL
 DEPENDENT VARIABLE CP

Z B1: .1580 .3173 .4590 .6020 .6970 .8390 .9250

X/C	.7575	.5131	.3393	.2912	.2249
.025	.1627	.1194	.1384	.1396	.1241
.050	.2603	.2575	.1431	.1325	.1336
.075	.2665	.1095	.0843	.0824	.0795
.100	.1547	.2026	.0323	.0519	.0434
.125	.1010	.1071	.0549	.0467	.0450
.150	.4273	.3132	.1792	.2751	.2191
.175	.3774	.2683	.2678	.2222	.2754
.200	.3556	.2562	.2662	.2418	.2274
ALPHA = 61 = 15.859	BETA = 1 21 =	MACH = 1.3903	O	= 599.44	P = 443.00

SECTION 1: INERTIAL
 DEPENDENT VARIABLE CP

X/C	.6939	.5244	.3330	.2425	.2010
.025	.1553	.0639	.1450	.1554	.2028
.050	.2912	.1519	.1533	.1662	.1568
.075	.2742	.0585	.0240	.0354	.0413
.100	.0723	.0351	.0521	.0521	.0588
.125	.1171	.1262	.1105	.0316	.0985
.150	.4586	.2552	.1274	.2827	.2900
.175	.3500	.3183	.3290	.3313	.4529
.200	.3156	.3153	.3150	.4186	.3765
ALPHA = 61 = 15.860	BETA = 1 22 =	MACH = 1.3903	O	= 599.44	P = 443.00

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TEACHNICAL PROFILE DATA

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

جامعة الرقة

PARAMETRIC DATA					
RUDER =	10.000	SPD/RK =	35.000		
BDFLAP =	16.300	L-ELVN =	10.000		
R-ELVN =	.000	MACH =	1.250		
XMAP = 1075.6900 IN.	X0 = 1075.6900 IN.				
YMAP = .0000 IN.	Y0 = .0000 IN.				
ZMAP = 375.0000 IN.	Z0 = 20				
SCALE = .0300					
ALPHA (1) = -3.935	BETA (1) = -3.845	MACH = 1.2451	0 = 599.58	P = 552.51	RNL = 3.0225
SECTION (1) VERTICAL					
DEPENDENT VARIABLE CP					

1553 - 3173 - 4590 - 6320 - 6628 - 6676 - 6692

4.45	-2.259	-0.441	-0.479
4.46	-2.152	-0.622	-0.025
4.47	-1.419	-1.479	-1.671
4.48	-1.715	-0.759	-1.734
4.49	-2.243	-1.156	-1.590
4.50	-1.357	-2.852	-2.889
4.51	-1.571	-1.235	-3.186
4.52	-1.571	-1.235	-2.787
4.53	-1.571	-1.235	-2.234
4.54	-1.571	-1.235	-2.579
4.55	-1.571	-1.235	-3.442
4.56	-1.571	-1.235	-3.631

DATE 14 FEB 76

REGULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 679D

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL
 Δ PMA = -1.374 BETA (3) = 4.269 MACH = 1.2451 0 = 599.58 P = 552.51 RNL = 3.0223
 SECTION 1: VERTICAL
 Z, B, / 11590 .3170 .4590 .6020 .6970 .8390 .9250

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AMES 11-073(CA148) - 140A/B/C/R ORB VERTICAL

(XEBV29)

$\alpha_{\text{crit}} = 3.922 \quad \beta_{\text{crit}} = 3.922 \quad \delta_{\text{crit}} = 3.0 \quad M_{\text{crit}} = 1.2459 \quad \sigma = 599.90 \quad P = 552.04 \quad F_{\text{NL}} = 3.0192$

DEPENDENT VARIABLE CP

$\alpha = 3.0$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.1$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.2$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.3$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.4$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.5$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.6$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.7$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.8$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.9$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 4.0$	.1590	.3170	.4590	.6020	.6970	.8390	.9250

$\alpha_{\text{crit}} = 3.922 \quad \beta_{\text{crit}} = 3.922 \quad \delta_{\text{crit}} = 3.0 \quad M_{\text{crit}} = 1.2454 \quad \sigma = 599.82 \quad P = 552.51 \quad F_{\text{NL}} = 3.0214$

DEPENDENT VARIABLE CP

$\alpha = 3.0$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.1$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.2$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.3$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.4$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.5$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.6$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.7$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.8$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.9$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 4.0$	.1590	.3170	.4590	.6020	.6970	.8390	.9250

$\alpha_{\text{crit}} = 3.922 \quad \beta_{\text{crit}} = 3.922 \quad \delta_{\text{crit}} = 3.0 \quad M_{\text{crit}} = 1.2454 \quad \sigma = 599.82 \quad P = 552.51 \quad F_{\text{NL}} = 3.0214$

DEPENDENT VARIABLE CP

$\alpha = 3.0$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.1$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.2$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.3$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.4$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.5$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.6$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.7$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.8$	.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 3.9$.1590	.3170	.4590	.6020	.6970	.8390	.9250
$\alpha = 4.0$.1590	.3170	.4590	.6020	.6970	.8390	.9250

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

ALPHA (5) = 11.927 BETA (3) = 4.253 MACH = 1.2447 0 = 599.71 P = 552.98 R/L = 3.0237
 SECTION 1: VERTICAL
 DEPENDENT VARIABLE CP

Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY	.6652	.4325		.2704		.1771	.0933
.000	.0720	-.2412		-.4640		-.5803	-.6986
.025	.1377	-.2287		-.4973		-.5753	-.6780
.050	.1648	-.0949		-.2824		-.3221	-.3915
.100	-.0349	-.1493		-.1929		-.2302	-.2543
.200	-.2145	-.2445		-.2399		-.1789	-.1952
.500	-.4326	-.5174	-.4711	-.4494	-.4036	-.4212	-.5670
				-.4527	-.4532	-.4330	-.5198
				-.4626	-.4558	-.4666	-.5273

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(XEBV29)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

CREF	=	2590.0000 SQ.FT.	XMRP	=	1076.6800 IN. X0
LREF	=	.7+.0000 IN.	YMRP	=	.0000 IN. Y0
B-CF	=	936.0680 IN.	ZMRP	=	375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) = -3.994 BETA (1) = -3.852 MACH = 1.0997 Q = 600.21 P = 709.06 RN/L = 3.1908

SECTION 1 : VERTICAL

X/CY

.000	.6879	.5465	.5326	.5751	.5734
.025	.5286	.3636	.3417	.3485	.2960
.050	.5192	.3657	.3311	.3377	.3104
.100	.3323	.2792	.2574	.2582	.2351
.150	.2263	.1939	.1843	.2053	.1402
.200	.0545	.0390	.0675	.0771	.0930
.250	-.5035	-.4793	-.1905	-.3941	-.6949
.300	-.3985	-.4281	-.3670	-.3762	-.5958
.350	-.3047	-.3412	-.2931	-.3125	-.5349
ALPHA (1) = -3.985 BETA (2) = .190 MACH = 1.0997 Q = 600.21 P = 709.06 RN/L = 3.1908					
SECTION 1 : VERTICAL					
Z/BV	.1580	.3170	.4590	.6020	.6970
X/CY					
.000	.7432	.6175	.6076	.6135	.5370
.025	.2523	-.0162	-.1265	-.2203	-.3331
.050	.3719	.1983	.0501	.0031	-.2418
.100	.2795	.1234	.0894	.0827	.0808
.200	.1203	.0692	.0740	.0707	.0846
.500	-.0306	-.0538	-.0229	.0251	-.0967
.665	-.5231	-.5138	-.1903	-.4520	-.4214
.775	-.4091	-.4957	-.4375	-.4236	-.6928
.950	-.3516	-.4489	-.3901	-.4324	-.6514

SECTION 1 : VERTICAL

X/CY

.000	.7432	.6175	.6076	.6135	.5370
.025	.2523	-.0162	-.1265	-.2203	-.3331
.050	.3719	.1983	.0501	.0031	-.2418
.100	.2795	.1234	.0894	.0827	.0808
.200	.1203	.0692	.0740	.0707	.0846
.500	-.0306	-.0538	-.0229	.0251	-.0967
.665	-.5231	-.5138	-.1903	-.4520	-.4214
.775	-.4091	-.4957	-.4375	-.4236	-.6928
.950	-.3516	-.4489	-.3901	-.4324	-.6514

PARAMETRIC DATA

RUDDER	=	-10.000	SPDBRK	=	35.000
BDFLAP	=	16.300	L-ELVN	=	10.000
R-ELVN	=	.000	MACH	=	1.100

(XEBV3D) (13 AUG 75)

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TABULATED PRESSURE DATA - CH4B (AMES 11-073-1)

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AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

$\Delta L \text{ PMA} (1) = -3.992$ $\text{BETA} (3) = 4.268$ $\text{MACH} = 1.0997$ $Q = 600.21$ $P = 709.06$ $RN/L = 3.1908$

SECTION 1 VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6300 .6735 .5372 .4985 .3745 .2635
 .0225 .0295 -.3373 -.5572 -.6669 -.6362
 .0500 .0458 .2355 .5388 -.6473 -.6317
 .1500 .1315 .0589 .2527 -.3973 -.5894
 .3200 .2216 .0890 .1574 -.2586 -.3995
 .5200 -.1246 .1590 .1973 -.4791 -.1876 -.1966
 .6950 -.5831 .5477 -.1973 -.4829 -.4333 -.6470
 .7750 .4417 -.5578 .5054 -.5235 -.4923 -.4732 -.6135
 .9000 .4308 .5432 .4824 -.4824 -.5072 -.5257 -.5906

$\Delta L \text{ PMA} (2) = -0.020$ $\text{BETA} (1) = -3.866$ $\text{MACH} = 1.0986$ $Q = 599.48$ $P = 709.54$ $RN/L = 3.1885$

SECTION 1 VERTICAL

Z/BY .1580 .3170 .4590 .5020 .6970 .8390 .9250

X/CY .0000 .6426 .4835 .4559 .4727 .4762
 .5250 .4533 .2913 .2621 .2736 .2393
 .0500 .4581 .2639 .2545 .2665 .2457
 .1500 .3239 .2051 .1861 .1862 .1701
 .3000 .1651 .1191 .1145 .1463 .0888
 .5200 -.0076 -.0182 .0044 .0195 -.1337
 .6250 .5391 .5103 .1606 .3958 -.4520 -.7109
 .7500 .3957 .4583 .4342 .3977 .4119 .4676 .6150
 .9000 .3529 .4034 .4034 -.3325 -.3590 .4627 .5627

$\Delta L \text{ PMA} (2) = -0.014$ $\text{BETA} (2) = .187$ $\text{MACH} = 1.0986$ $Q = 599.48$ $P = 709.54$ $RN/L = 3.1885$

SECTION 1 VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .0000 .7052 .5599 .5279 .5314 .4562
 .5250 .1895 .0596 .1793 .2259 .3444
 .6600 .2246 .1507 .0301 .0776 .2507
 .6600 .2368 .0754 .0276 .0380 .0355
 .7050 .0773 .2119 .0049 .0205 .0392
 .7620 .0838 .0961 .0800 .0218 .1332
 .8120 .3431 .1559 .1486 .4708 .4719
 .8500 .4132 .1533 .1472 .4829 .4531 .5083 .6602
 .9000 .2742 .4686 .4186 .4597 .5272 .5272

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

ALPHA (3) = - .017 BETA (3) = 4.244 MACH = 1.0986 Q = 599.48 P = 709.54 RNL = 3.1886

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6292 .4767 .4072 .5805 .7306 .6717

.025 -.0609 -.3542 -.5772 -.6977 -.6539

.050 -.0363 -.3091 -.2724 -.4241 -.6332

.100 -.0871 -.1190 -.2202 -.2795 -.4233

.150 -.0226 -.1318 -.2141 -.2207 -.1899

.200 -.1895 -.2141 -.2207 -.2207 -.1899

.250 -.5723 -.6001 -.1618 -.4992 -.5092

.300 -.4425 -.5975 -.5376 -.5392 -.5210

.350 -.4370 -.5679 -.5096 -.5430 -.5589

ALPHA (3) = 3.958 BETA (1) = - 3.869 MACH = 1.1006 Q = 600.44 P = 708.14 RNL = 3.1894

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6988 .4323 .3751 .3751 .3739 .3787

.025 .3568 .2159 .1819 .1819 .1964 .1768

.050 .3739 .2304 .1758 .1758 .1893 .1778

.100 .2582 .1368 .1098 .1098 .1158 .1009

.150 .1058 .0455 .0472 .0472 .0815 .0319

.200 .0632 -.0802 -.0528 -.0528 -.0370

.250 -.6027 -.5269 -.1502 -.4759 -.4216

.300 -.4557 -.4982 -.4391 -.4254 -.4483

.350 -.3606 -.4467 -.3786 -.3960 -.4975

.400 -.3023 -.3710 -.3710 -.3960 -.4952

ALPHA (3) = 3.959 BETA (2) = .177 MACH = 1.1006 Q = 600.44 P = 708.14 RNL = 3.1894

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6769 .4966 .4441 .4441 .4292 .3602

.025 .1446 -.1039 -.2277 -.2277 -.2405 -.3549

.050 .2902 .1055 -.1169 -.1169 -.1857 -.2784

.100 .2011 .0107 -.0352 -.0352 -.0220 -.0171

.150 .0197 -.0558 -.0579 -.0579 -.0319 -.0178

.200 .1360 .1160 -.1460 -.1460 -.0772 -.1773

.250 .5754 .5730 -.5093 -.5093 -.0760 -.1706

.300 .376 .5636 .5053 -.4889 -.5312 -.6709

.350 .4023 .5215 .4599 .4903 .5424 -.6126

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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		AMES 11-073(0A14B) - 140A/B/C/R CRB VERTICAL		(XEBV30)	
SECTION (1) =		BETA (3) =	MACH =	MACH =	RNL =
SECTION (1) =		4.234	1.006	600.44	3.1694
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.5879	.4292	.3296	.2370	.0954
.025	-.1036	-.3723	-.6024	-.7665	-.7139
.050	-.0420	-.3409	-.6180	-.7233	-.7091
.150	-.1523	-.1761	-.3428	-.4295	-.6515
.250	-.0596	-.1744	-.2450	-.2958	-.4189
.400	-.2552	-.2795	-.2729	-.2221	-.2065
.625	-.5209	-.6522	-.1487	-.5176	-.4968
.875	-.4255	-.5778	-.5776	-.5495	-.7221
.100	-.3437	-.5835	-.5447	-.5750	-.6605
ALFA (4) =	8.035	BETA (1) =	-3.862	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6126	.3790	.2981	.2708	.2600
.125	.3582	.1526	.0982	.1197	.1171
.150	.3580	.1694	.0958	.1128	.1116
.250	.2127	.0618	.0357	.0466	.0276
.400	.2226	.2283	-.0173	.0147	-.0252
.625	.1522	-.1254	-.0533	-.0904	-.2168
.875	.1567	-.1667	-.5053	-.5444	-.7262
.100	.3112	-.5354	-.4778	-.4728	-.6273
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516	.3610	.3014	.2975
.125	.2177	-.1437	-.2813	-.2846	-.3588
.150	.3584	.1525	-.1976	-.2723	-.3182
.250	.1650	-.1956	-.1040	-.0978	-.0796
.400	.1632	-.2143	-.1260	-.0952	-.0756
.625	.1613	-.2104	-.1207	-.1300	-.2149
.875	.1652	-.3558	-.1420	-.5160	-.7456
.100	.5117	-.5435	-.5403	-.5233	-.5603
ALFA (4) =	9.034	BETA (2) =	.181	MACH =	1.0985
SECTION (1) =					
Z/BV	.1580	.3170	.4590	.6020	.6970 .8390 .9250
X/CY					
.000	.6174	.4516			

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

(XCBV30)

SECTION : 11-LVERTICAL

BETA (3) = 4.260 MACH = 1.0970 Q = 599.10 P = 711.19 PN/L = 3.1692

Z, BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X / CV .0C0 .6330 .3587 .1848 .0553 -.1109

.025 -.0079 -.3992 -.6207 -.7351 -.8226

.050 .0997 -.3482 -.6609 -.7403 -.8348

.100 .084 -.2113 -.4459 -.5014 -.6113

.150 .1553 -.2647 -.3073 -.4501 -.5329

.200 .3425 -.3619 -.3555 -.5683 -.3148

.250 .5871 -.6939 -.1577 -.6127 -.5503

.300 .585 -.6247 -.6346 -.6181 -.5995

.350 .4639 -.4762 -.6140 -.6016 -.6016

.400 -.6167 -.6167 -.6167 -.6167 -.6167

.450 -.6142 -.6142 -.6142 -.6142 -.6142

.500 -.6142 -.6142 -.6142 -.6142 -.6142

.550 -.6142 -.6142 -.6142 -.6142 -.6142

.600 -.6142 -.6142 -.6142 -.6142 -.6142

.650 -.6142 -.6142 -.6142 -.6142 -.6142

.700 -.6142 -.6142 -.6142 -.6142 -.6142

.750 -.6142 -.6142 -.6142 -.6142 -.6142

.800 -.6142 -.6142 -.6142 -.6142 -.6142

.850 -.6142 -.6142 -.6142 -.6142 -.6142

.900 -.6142 -.6142 -.6142 -.6142 -.6142

.950 -.6142 -.6142 -.6142 -.6142 -.6142

.000 -.6142 -.6142 -.6142 -.6142 -.6142

.050 -.6142 -.6142 -.6142 -.6142 -.6142

.100 -.6142 -.6142 -.6142 -.6142 -.6142

.150 -.6142 -.6142 -.6142 -.6142 -.6142

.200 -.6142 -.6142 -.6142 -.6142 -.6142

.250 -.6142 -.6142 -.6142 -.6142 -.6142

.300 -.6142 -.6142 -.6142 -.6142 -.6142

.350 -.6142 -.6142 -.6142 -.6142 -.6142

.400 -.6142 -.6142 -.6142 -.6142 -.6142

.450 -.6142 -.6142 -.6142 -.6142 -.6142

.500 -.6142 -.6142 -.6142 -.6142 -.6142

.550 -.6142 -.6142 -.6142 -.6142 -.6142

.600 -.6142 -.6142 -.6142 -.6142 -.6142

.650 -.6142 -.6142 -.6142 -.6142 -.6142

.700 -.6142 -.6142 -.6142 -.6142 -.6142

.750 -.6142 -.6142 -.6142 -.6142 -.6142

.800 -.6142 -.6142 -.6142 -.6142 -.6142

.850 -.6142 -.6142 -.6142 -.6142 -.6142

.900 -.6142 -.6142 -.6142 -.6142 -.6142

.950 -.6142 -.6142 -.6142 -.6142 -.6142

.000 -.6142 -.6142 -.6142 -.6142 -.6142

.050 -.6142 -.6142 -.6142 -.6142 -.6142

.100 -.6142 -.6142 -.6142 -.6142 -.6142

.150 -.6142 -.6142 -.6142 -.6142 -.6142

.200 -.6142 -.6142 -.6142 -.6142 -.6142

.250 -.6142 -.6142 -.6142 -.6142 -.6142

.300 -.6142 -.6142 -.6142 -.6142 -.6142

.350 -.6142 -.6142 -.6142 -.6142 -.6142

.400 -.6142 -.6142 -.6142 -.6142 -.6142

.450 -.6142 -.6142 -.6142 -.6142 -.6142

.500 -.6142 -.6142 -.6142 -.6142 -.6142

.550 -.6142 -.6142 -.6142 -.6142 -.6142

.600 -.6142 -.6142 -.6142 -.6142 -.6142

.650 -.6142 -.6142 -.6142 -.6142 -.6142

.700 -.6142 -.6142 -.6142 -.6142 -.6142

.750 -.6142 -.6142 -.6142 -.6142 -.6142

.800 -.6142 -.6142 -.6142 -.6142 -.6142

.850 -.6142 -.6142 -.6142 -.6142 -.6142

.900 -.6142 -.6142 -.6142 -.6142 -.6142

.950 -.6142 -.6142 -.6142 -.6142 -.6142

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TABULATED PRESSURE DATA - OAI14B (AMES 11-073-1)

AMES 11-07310A14B1 - 140A/B/C/R ORB VERTICAL

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 (XEROXED) (13 AUG 75)

REFERENCE DATA

DREF = 1.00000 SQ.FT. XRP = 1076.6800 IN. X0
 LCF = .75000 IN. YRP = .0000 IN. Y0
 SREF = .936.5680 IN. ZRP = .375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -3.977 BETA (1) = -3.852 MACH = .89977 Q = 600.28 P = 1059.2 RVL = 3.5777

SECTION 1 INVERTICAL DEPENDENT VARIABLE CP

Z/BV	-1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
000	.48802	.3486		.4105		.5262	.4933
025	.34441	.1935		.2212		.1522	.0402
050	.3292	.1939		.2066		.1569	.0943
150	.1800	.0395		.1121		.0830	.0418
300	.0302	.03031		.0086		.0081	.0672
520	-.1943	-.1671		-.1460		-.1579	-.2822
555	-.4021	-.3912		-.20564	-.4234	-.5397	-.7898
715	-.2530	-.2324		-.2280	-.3620	-.3353	-.5298
900	-.2534	-.2533		-.2933	-.3478	-.3343	-.3506
						-.3917	-.4624
							-.4073
ALPHA (1)	= -3.975	BETA (2)	= .187	MACH	= .89977	Q	600.28
SECTION 2 INVERTICAL		DEPENDENT VARIABLE CP					P = 1059.2
Z/BV	-1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
000	.5543	.4477		.5212		.4422	.2530
025	.03339	.2778		-.4303		-.6281	-.6570
050	.1551	-.0182		-.0818		-.3059	-.6025
150	.0490	-.0833		-.1011		-.1763	-.1433
300	-.1057	-.1108		-.1343		-.1268	-.1683
520	-.6832	-.2945		-.2602		-.2298	-.2921
555	-.4655	-.4553		-.2040	-.7417	-.9419	-.5572
715	-.2547	-.3361		-.3176	-.4577	-.4810	-.5652
900	-.2540	-.2521		-.3271	-.3952	-.4106	-.4860
						-.4025	-.4426

PARAMETRIC DATA

RUNNER =	-10.000	SPDRK =	35.000
BOGLAP =	16.300	L-ELVN =	10.000
R-ELVN =	.003	MACH =	.900

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TAGULATED PRESSURE DATA - DATA B (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

PAGE 5752

EEPA(1) = -3.395 EETA(3) = 4.269 MACH = .89977 0 = 600.28 P = 1059.2 RN/L = 3.5777

(XEBV31)

DEPENDENT VARIABLE CP

EEPA(1) = -3.395 EETA(3) = 4.269 MACH = .8970 .8390 .9250

DEPENDENT VARIABLE CP

EEPA(1) = -3.395 EETA(3) = 4.269 MACH = .8970 .8390 .9250

DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

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DEPENDENT VARIABLE CP

EEPA(1) = -3.395 EETA(3) = 4.269 MACH = .8970 .8390 .9250

DEPENDENT VARIABLE CP

EEPA(1) = -3.395 EETA(3) = 4.269 MACH = .8970 .8390 .9250

DEPENDENT VARIABLE CP

AMES 11-07310A1481 - 140A/B/C/R ORB VERTICAL
 MACH = .89870 Q = 599.00 P = 1059.5 RFL = 3.5709

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INDEPENDENT VARIABLE CP
 THERMOCOUPLE
 1000 900 800 700 600 500 400 300 200 100 0
 1000 900 800 700 600 500 400 300 200 100 0

INDEPENDENT VARIABLE CP
 THERMOCOUPLE
 1000 900 800 700 600 500 400 300 200 100 0
 1000 900 800 700 600 500 400 300 200 100 0

DEPENDENT VARIABLE CP
 THERMOCOUPLE
 1000 900 800 700 600 500 400 300 200 100 0
 1000 900 800 700 600 500 400 300 200 100 0

DEPENDENT VARIABLE CP
 THERMOCOUPLE
 1000 900 800 700 600 500 400 300 200 100 0
 1000 900 800 700 600 500 400 300 200 100 0

DEPENDENT VARIABLE CP
 THERMOCOUPLE
 1000 900 800 700 600 500 400 300 200 100 0
 1000 900 800 700 600 500 400 300 200 100 0

AMES 11-073(048) -14CA/B/C/R ORB VERTICAL

MACH = 4.245

DETA (3) = .83807 O = .598.57 P = 1060.2 RNL = 3.5677

DEPENDENT VARIABLE CP

CP	1.5585	.3170	.4593	.6020	.6970	.8390	.9250
1	2.051	-1.934		0.162		-2.568	-3.700
2	1.6357	-1.7274		-0.9524		-0.9032	-0.8494
3	1.2245	-1.7812		-0.9690		-0.8909	-0.8210
4	0.8132	-1.9510		-1.6127		-0.8578	-0.7589
5	0.3916	-1.9356		-1.5636		-0.8474	-0.7966
6	-0.1695	-1.9466		-1.4899		-0.5609	-0.7146
7	-0.6815	-1.9475		-1.4855		-0.6478	-0.5933
8	-1.2575	-1.9435		-1.3945		-0.5283	-0.4447
9	-1.8335	-1.9425		-1.3935		-0.4834	-0.4756
10	-2.4095	-1.9425		-1.3925		-0.3191	-0.3709
11	-2.9854	-1.9421		-1.3914			
12	-3.5614	-1.9414		-1.3854			
13	-4.1374	-1.9404		-1.3814			
14	-4.7134	-1.9393		-1.3774			
15	-5.2894	-1.9372		-1.3734			
16	-5.8654	-1.9351		-1.3694			
17	-6.4414	-1.9329		-1.3654			
18	-7.0174	-1.9308		-1.3614			
19	-7.5934	-1.9287		-1.3574			
20	-8.1694	-1.9266		-1.3534			
21	-8.7454	-1.9244		-1.3494			
22	-9.3214	-1.9222		-1.3454			
23	-9.8974	-1.9199		-1.3414			
24	-10.4734	-1.9176		-1.3374			
25	-11.0494	-1.9153		-1.3334			
26	-11.6254	-1.9129		-1.3294			
27	-12.2014	-1.9106		-1.3254			
28	-12.7774	-1.9082		-1.3214			
29	-13.3534	-1.9058		-1.3174			
30	-13.9294	-1.9034		-1.3134			
31	-14.5054	-1.9009		-1.3094			
32	-15.0814	-1.8984		-1.3054			
33	-15.6574	-1.8959		-1.3014			
34	-16.2334	-1.8934		-1.2974			
35	-16.8094	-1.8908		-1.2934			
36	-17.3854	-1.8883		-1.2894			
37	-17.9614	-1.8857		-1.2854			
38	-18.5374	-1.8831		-1.2814			
39	-19.1134	-1.8805		-1.2774			
40	-19.6894	-1.8779		-1.2734			
41	-20.2654	-1.8753		-1.2694			
42	-20.8414	-1.8727		-1.2654			
43	-21.4174	-1.8699		-1.2614			
44	-21.9934	-1.8673		-1.2574			
45	-22.5694	-1.8646		-1.2534			
46	-23.1454	-1.8619		-1.2494			
47	-23.7214	-1.8592		-1.2454			
48	-24.2974	-1.8565		-1.2414			
49	-24.8734	-1.8537		-1.2374			
50	-25.4494	-1.8510		-1.2334			
51	-26.0254	-1.8483		-1.2294			
52	-26.5994	-1.8456		-1.2254			
53	-27.1754	-1.8428		-1.2214			
54	-27.7514	-1.8399		-1.2174			
55	-28.3274	-1.8372		-1.2134			
56	-28.8934	-1.8344		-1.2094			
57	-29.4694	-1.8316		-1.2054			
58	-30.0454	-1.8288		-1.2014			
59	-30.6214	-1.8259		-1.1974			
60	-31.1974	-1.8231		-1.1934			
61	-31.7734	-1.8203		-1.1894			
62	-32.3494	-1.8174		-1.1854			
63	-32.9254	-1.8146		-1.1814			
64	-33.4994	-1.8117		-1.1774			
65	-34.0754	-1.8088		-1.1734			
66	-34.6514	-1.8059		-1.1694			
67	-35.2274	-1.8030		-1.1654			
68	-35.7934	-1.7999		-1.1614			
69	-36.3694	-1.7970		-1.1574			
70	-36.9454	-1.7941		-1.1534			
71	-37.5214	-1.7912		-1.1494			
72	-38.0974	-1.7883		-1.1454			
73	-38.6734	-1.7854		-1.1414			
74	-39.2494	-1.7825		-1.1374			
75	-39.8254	-1.7796		-1.1334			
76	-40.3994	-1.7767		-1.1294			
77	-40.9754	-1.7737		-1.1254			
78	-41.5514	-1.7708		-1.1214			
79	-42.1274	-1.7678		-1.1174			
80	-42.6934	-1.7649		-1.1134			
81	-43.2694	-1.7619		-1.1094			
82	-43.8454	-1.7589		-1.1054			
83	-44.4214	-1.7559		-1.1014			
84	-44.9974	-1.7529		-1.0974			
85	-45.5734	-1.7499		-1.0934			
86	-46.1494	-1.7469		-1.0894			
87	-46.7254	-1.7439		-1.0854			
88	-47.2994	-1.7409		-1.0814			
89	-47.8754	-1.7379		-1.0774			
90	-48.4514	-1.7349		-1.0734			
91	-48.9974	-1.7319		-1.0694			
92	-49.5734	-1.7289		-1.0654			
93	-50.1494	-1.7259		-1.0614			
94	-50.7254	-1.7229		-1.0574			
95	-51.2994	-1.7199		-1.0534			
96	-51.8754	-1.7169		-1.0494			
97	-52.4514	-1.7139		-1.0454			
98	-53.0274	-1.7109		-1.0414			
99	-53.5994	-1.7079		-1.0374			
100	-54.1754	-1.7049		-1.0334			
101	-54.7514	-1.7019		-1.0294			
102	-55.3274	-1.6989		-1.0254			
103	-55.8994	-1.6959		-1.0214			
104	-56.4754	-1.6929		-1.0174			
105	-57.0494	-1.6899		-1.0134			
106	-57.6254	-1.6869		-1.0094			
107	-58.1994	-1.6839		-1.0054			
108	-58.7754	-1.6809		-1.0014			
109	-59.3494	-1.6779		-0.9974			
110	-59.9254	-1.6749		-0.9934			
111	-60.4994	-1.6719		-0.9894			
112	-61.0754	-1.6689		-0.9854			
113	-61.6494	-1.6659		-0.9814			
114	-62.2254	-1.6629		-0.9774			
115	-62.7994	-1.6599		-0.9734			
116	-63.3754	-1.6569		-0.9694			
117	-63.9494	-1.6539		-0.9654			
118	-64.5254	-1.6509		-0.9614			
119	-65.0994	-1.6479		-0.9574			
120	-65.6754	-1.6449		-0.9534			
121	-66.2494	-1.6419		-0.9494			
122	-66.8254	-1.6389		-0.9454			
123	-67.3994	-1.6359		-0.9414			
124	-67.9754	-1.6329		-0.9374			
125	-68.5494	-1.6299		-0.9334			
126	-69.1254	-1.6269		-0.9294			
127	-69.6994	-1.6239		-0.9254			
128	-70.2754	-1.6209		-0.9214			
129	-70.8494	-1.6179		-0.9174			
130	-71.4254	-1.6149		-0.9134			
131	-71.9994	-1.6119		-0.9094			
132	-72.5754	-1.6089		-0.9054			
133	-73.1494	-1.6059		-0.9014			
134	-73.7254	-1.6029		-0.8974			
135	-74.2994	-1.5999		-0.8934			
136	-74.8754	-1.5969		-0.8894			
137	-75.4494	-1.5939		-0.8854			
138	-76.0254	-1.5909		-0.8814			
139	-76.5994	-1.5879		-0.8774			
140	-77.1754	-1.5849		-0.8734			
141	-77.7494	-1.5819		-0.8694			
142	-78.3254	-1.5789		-0.8654			
143	-78.8994	-1.5759		-0.8614			
144	-79.4754	-1.5729		-0.8574			
145	-80.0494	-1.5699		-0.8534			
146	-80.6254	-1.5669		-0.8494			
147	-81.1994	-1.5639		-0.8454			
148	-81.7754	-1.5609		-0.8414			
149	-82.3494	-1.5579		-0.8374			
150	-82.9254	-1.5549		-0.8334			
151	-83.4994	-1.5519		-0.8294			
152	-84.0754	-1.5489		-0.8254			
153	-84.6494	-1.5459		-0.8214			
154	-85.2254	-1.5429		-0.8174			
155	-85.7994	-1.5399		-0.8134			
156	-86.3754	-1.5369		-0.8094			
157	-86.9494	-1.5339		-0.8054			
158	-87.5254	-1.5309		-0.8014			
159	-88.0994	-1.5279		-0.7974			
160	-88.6754	-1.5249		-0.7934			
161	-89.2494	-1.5219		-0.7894			
162	-89.8254	-1.5189		-0.7854			
163	-90.3994	-1.5159		-0.7814			

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

(XEV32) (13 AUG 75)

REFERENCE DATA

S _H	=	2690.0000 SQ.FT.	X _M R.P	=	1076.6800 IN. X0
L _P E _F	=	.474.8900 IN.	Y _M R.P	=	.0000 IN. Y0
S _C E _F	=	.936.0580 IN.	Z _M R.P	=	.375.0000 IN. Z0
S _C H _E	=	.0300			

ALPHA (1) = -4.052 BETA (1) = -7.850 MACH = .59664 0 = 594.68 P = 2386.3 R/N/L = 4.8170

SECTION 11 VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.5834	-1.457	.0356	.2344	.1624
.025	.4521	.3929	.4229	.3827	.3346
.050	.4014	.3457	.3584	.3369	.2926
.150	.2430	.2039	.2181	.1886	.1341
.303	.0991	.0661	.1090	.0656	.0112
.529	-.1759	-.1120	-.1198	-.1212	-.1839
.555	-.2957	-.2332	-.1820	-.2327	-.2524
.775	-.2273	-.2121	-.2301	-.2481	-.2268
.800	-.2337	-.3273	-.3121	-.2764	-.2252
					.2289

ALPHA (1) = -4.036 BETA (2) = -3.835 MACH = .59664 0 = 594.68 P = 2386.3 R/N/L = 4.8170

SECTION 11 VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.3668	.2050	.4059	.4991	.4674
.025	.2734	.1736	.1603	.0886	-.0265
.050	.2589	.1717	.1542	.0999	.0637
.150	.1237	.0576	.0617	.0202	.0095
.200	-.0583	-.0452	-.0393	-.0520	-.0283
.520	-.2513	-.1945	-.2226	-.2028	-.2447
.635	-.3551	-.2828	-.1850	-.3436	-.4095
.775	-.2279	-.2503	-.2903	-.2830	-.2954
.800	-.2072	-.3590	-.3450	-.3219	-.2634

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073:OA14B) -140A/B/C/R ORB VERTICAL

$\Delta \text{P} = 11 = -4.020$ $\text{BETA} (3) = .192$ $\text{MACH} = .59664$ $\text{Q} = .594.68$ $P = .2386.3$ $\text{RN/L} = 4.8170$

SECTION 1: VERTICAL
 $Z_{\text{EV}} = .1580$ $.3170$ $.4590$ $.6020$ $.6970$ $.8390$ $.9250$

$X_{\text{EV}} = .4912$ $.4461$ $.4419$ $.4717$ $.42169$ $.4584$ $.4723$

$C_{\text{EV}} = .025$ $-.0872$ $-.4380$ $-.0844$ $-.0165$ $-.1214$ $-.1252$

$\alpha_{\text{EV}} = .150$ $-.0492$ $-.0844$ $-.0165$ $-.1214$ $-.1252$ $-.1719$

$\beta_{\text{EV}} = .200$ $-.1252$ $-.1719$ $-.2619$ $-.2619$ $-.2619$ $-.2619$

$\gamma_{\text{EV}} = .625$ $-.3178$ $-.3377$ $-.1885$ $-.3439$ $-.3386$ $-.3386$

$\delta_{\text{EV}} = .775$ $-.2483$ $-.2326$ $-.3967$ $-.3967$ $-.3967$ $-.3967$

$\epsilon_{\text{EV}} = .923$ $-.4029$ $\text{BETA} (4) = .4.273$ $\text{MACH} = .59664$ $\text{Q} = .594.68$ $P = .2386.3$ $\text{RN/L} = 4.8170$

SECTION 2: VERTICAL
 $Z_{\text{EV}} = .1580$ $.3170$ $.4590$ $.6020$ $.6970$ $.8390$ $.9250$

$X_{\text{EV}} = .2931$ $.1049$ $.0385$ $.9221$ $.8114$ $.6611$ $.4622$

$C_{\text{EV}} = .025$ $-.3639$ $-.6748$ $-.5626$ $-.3221$ $-.3221$ $-.3221$

$\alpha_{\text{EV}} = .025$ $-.2185$ $-.2185$ $-.2185$ $-.2185$ $-.2185$ $-.2185$

$\beta_{\text{EV}} = .025$ $-.1724$ $-.1724$ $-.1724$ $-.1724$ $-.1724$ $-.1724$

$\gamma_{\text{EV}} = .025$ $-.1915$ $-.1915$ $-.1915$ $-.1915$ $-.1915$ $-.1915$

$\delta_{\text{EV}} = .025$ $-.3961$ $-.3961$ $-.3961$ $-.3961$ $-.3961$ $-.3961$

$\epsilon_{\text{EV}} = .025$ $-.2682$ $-.2682$ $-.2682$ $-.2682$ $-.2682$ $-.2682$

$\eta_{\text{EV}} = .045$ $\text{BETA} (5) = .8.346$ $\text{MACH} = .59664$ $\text{Q} = .594.68$ $P = .2386.3$ $\text{RN/L} = 4.8170$

SECTION 3: VERTICAL
 $Z_{\text{EV}} = .1580$ $.3170$ $.4590$ $.6020$ $.6970$ $.8390$ $.9250$

$X_{\text{EV}} = .275$ $.5753$ $.5717$ $.1802$ $.2023$ $.1776$ $.0762$

$C_{\text{EV}} = .025$ $-.5134$ $-.3315$ $-.1250$ $-.1250$ $-.1250$ $-.1250$

$\alpha_{\text{EV}} = .025$ $-.3315$ $-.1250$ $-.1250$ $-.1250$ $-.1250$ $-.1250$

$\beta_{\text{EV}} = .025$ $-.4453$ $-.4453$ $-.4453$ $-.4453$ $-.4453$ $-.4453$

$\gamma_{\text{EV}} = .025$ $-.121$ $-.1947$ $-.5875$ $-.7073$ $-.121$ $-.3742$

$\delta_{\text{EV}} = .025$ $-.3237$ $-.3237$ $-.3237$ $-.3237$ $-.3237$ $-.3237$

$\epsilon_{\text{EV}} = .025$ $-.4334$ $-.4334$ $-.4334$ $-.4334$ $-.4334$ $-.4334$

$\eta_{\text{EV}} = .045$ $\text{BETA} (6) = .8.346$ $\text{MACH} = .59664$ $\text{Q} = .594.68$ $P = .2386.3$ $\text{RN/L} = 4.8170$

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TABULATED PRESSURE DATA - 00148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

ALPHA (2) = .034 BETA (1) = -7.883 MACH = .59622 Q = .593.85 P = .2386.3 RN/L = .4.8132

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4550 .6020 .6970 .8390 .9250

X/CY

.260 .0114 -.2280 -.0569 .1567 .1081
 .225 .4128 .3591 .4014 .3495 .2997
 .050 .3591 .3071 .3382 .3020 .2633
 .150 .2015 .1754 .1969 .1688 .1168
 .300 .0666 .0422 .0395 .0514 .0075
 .520 -.954 -.1189 -.1286 -.1189 -.1849
 .725 -.3004 -.2315 -.1655 -.2554 -.2580 -.3507
 .775 -.2263 -.2080 -.2269 -.2547 -.2339 -.2621
 .900 -.2862 -.3236 -.3236 -.3212 -.2916 -.2092

ALPHA (2) = .043 BETA (2) = -3.857 MACH = .59622 Q = .593.85 P = .2386.3 RN/L = .4.8132

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4550 .6020 .6970 .8390 .9250

X/CY

.500 .3314 .2376 .3393 .4322 .3985
 .625 .2248 .1435 .1473 .0792 .0205
 .750 .1255 .1372 .1281 .0868 .0458
 .150 .0378 .0315 .052 .0107 .0148
 .200 .0385 .0527 .052 .0107 .0148
 .420 -.2524 -.1955 -.2158 -.0636 -.0953
 .635 -.3020 -.2933 -.1655 -.3097 -.3732
 .775 -.2292 -.2501 -.2834 -.3104 -.2943
 .900 -.3051 -.3051 -.3633 -.3510 -.3203 -.2451 -.2333

ALPHA (2) = .045 BETA (3) = -.196 MACH = .59622 Q = .593.85 P = .2386.3 RN/L = .4.8132

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4550 .6020 .6970 .8390 .9250

X/CY

.500 .4441 .3929 .3882 .2389 .2329
 .625 -.1214 .4559 .6046 .4863 .8536
 .750 .0047 .1211 .2336 .3637 .5658
 .150 -.0614 .1450 .1728 .2279 .2111
 .300 -.1593 .1916 .1797 .2036 .2225
 .520 -.3242 .2881 .3302 .2985 .3062
 .625 -.3147 .3358 .1723 .4334 .4453
 .775 -.2490 .2891 .3397 .3798 .3492
 .900 -.3304 .3304 .3395 .4034 .3599 .3312
 .910 -.3304 .3304 .3395 .4034 .3670 .2899 .2545

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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ALPHA / 2) = .341		BETA (4) = 4.251	MACH = .59622	Q = .593.85	P = .2386.3	RN/L = .8132	(XEV32)
SOLUTION 11 VERTICAL		DEPENDENT VARIABLE CP					
Z_FV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
- .020	.2349	.0477		-.1228		-.3585	-.3261
.025	-.4116	.6861		-.3310		-.7707	-.3120
.030	-.3703	-.6111		-.8905		-.7362	-.1299
.035	-.3352	-.4970		-.6640		-.6720	-.7941
.040	-.2977	-.3419		-.4641		-.5539	-.5108
.045	-.2557	-.3577		-.4490		-.4327	-.3706
.050	-.2121	-.2763		-.1779		-.4962	-.4558
.055	-.1651	-.3153		-.3892		-.4502	-.4051
.060	-.1203	-.3246		-.4365		-.4514	-.4126
Z_FV+L / 2) = .335	BETA (5) = 8.312	MACH = .59622	0	= .553.85	P	= .2386.3	RN/L = .8132
SOLUTION 11 VERTICAL		DEPENDENT VARIABLE CP					
Z_FV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
- .1716	-.5221		-.7581		-.7197	-.5687	
-.7131	-.3214		-.1538		-.7674	-.6472	
-.7136	-.1554		-.1191		-.7603	-.6229	
-.9364	-.1025		-.1828		-.7240	-.6057	
-.9365	-.0242		-.1055		-.6590	-.5229	
-.9371	-.0242		-.2258		-.5811	-.5371	
-.9372	-.0242		-.5312		-.5491	-.5066	
-.9373	-.0243		-.3837		-.5262	-.4694	
-.9374	-.0243		-.4521		-.5232	-.4810	
Z_FV+L / 2) = .335	BETA (1) = 7.879	MACH = .59622	0	= .593.50	P	= .2386.4	RN/L = .8147
SOLUTION 11 VERTICAL		DEPENDENT VARIABLE CP					
Z_FV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
- .1550	-.2211		-.1407		.0692	.0288	
-.3847	-.3213		-.3578		.3115	.2721	
-.2116	.2663		-.3618		.2760	.2299	
-.1524	-.1745		-.3742		.1439	.0971	
-.1223	-.1745		-.3667		.0359	.0186	
-.1214	-.1745		-.2435		-.1173	-.1722	
-.1215	-.1745		-.2558		-.2687	-.3363	
-.1216	-.1745		-.3312		-.2350	-.2665	
-.1217	-.1745		-.3054		-.2069	-.1903	

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TABULATED PRESSURE DATA - OAI4B (AMES II-073-1)

E/P4 = 3 = 4.016		BETA (2) = -3.655		MACH = .59602	0 = 593.50	P = 2386.4	RNL = 4.8147
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP		(XEBY32)	PAGE 6/61
Z/BV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.2986	.1900		.2743		.3663	.3316
.025	.1795	.1083		.1178		.0656	-.0677
.050	.1665	.1055		.1062		.0651	.0623
.075	.0417	.0007		.0232		-.0082	-.0289
.100	-.0731	-.0860		-.0574		-.0676	-.1080
.125	-.2695	-.2049		-.2319		-.1962	-.2338
.150	-.3021	-.2815		-.1603	-.3303	-.3085	-.3855
.175	-.2275	-.2434		-.2895	-.3113	-.2849	-.3842
.200	-.3000	-.3078		-.3542	-.3539	-.3182	-.2822
ALPHA (3) = 4.015	BETA (3) =			.196	MACH = .59602	0 = 593.50	P = 2386.4
SECTION (1) VERTICAL					DEPENDENT VARIABLE CP		
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.4077	.3450		.3340		.1792	.1491
.025	-.1600	-.4763		-.5918		-.4943	-.8113
.050	-.0323	-.1419		-.2386		-.3942	-.5352
.075	-.0983	-.1728		-.1797		-.2249	-.2250
.100	-.1883	-.2254		-.1922		-.2038	-.2038
.125	-.3418	-.2935		-.3314		-.2910	-.3053
.150	-.3179	-.3373		-.4226	-.4058	-.4449	-.3454
.175	-.2498	-.2816		-.3492	-.3731	-.3527	-.3320
.200	-.3268	-.4001		-.3268	-.3954	-.3672	-.2872
ALPHA (3) = 4.015	BETA (4) = 4.243			MACH = .59602	0 = 593.50	P = 2386.4	RNL = 4.8147
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	-.2075	-.0225		-.1875		-.4310	-.4687
.025	-.4777	-.7560		-.3215		-.7721	-.1196
.050	-.4577	-.5580		-.9150		-.7440	-.9552
.075	-.3556	-.5522		-.7157		-.7050	-.7630
.100	-.3501	-.4412		-.4419		-.6472	-.5350
.125	-.5259	-.5474		-.4195		-.4436	-.3570
.150	-.5171	-.5675		-.1725	-.4705	-.5292	-.4499
.175	-.5658	-.3073		-.3937	-.4242	-.3958	-.3726
.200	-.4592	-.4285		-.4343	-.4072	-.3256	-.3150

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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$$\alpha_{ph} = 3.1 = 4.019 \quad \beta_{\alpha} = 1.5 = 8.295 \quad MACH = 8.295 \quad \rho = .59602 \quad 0 = .59350 \quad p = .2386.4 \quad RN/L = 4.8147$$

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

X/C	CP
.000	-1.2353
.025	-1.3123
.050	-1.0850
.075	-1.1291
.100	-1.0955
.125	-1.1513
.150	-1.1525
.175	-1.1595
.200	-1.1525
.225	-1.1595
.250	-1.1525
.275	-1.1595
.300	-1.1525
.3170	.4590
.350	.4590
.375	.4590
.400	.4590
.425	.4590
.450	.4590
.475	.4590
.500	.4590
.525	.4590
.550	.4590
.575	.4590
.600	.4590
.625	.4590
.650	.4590
.675	.4590
.700	.4590
.725	.4590
.750	.4590
.775	.4590
.800	.4590
.825	.4590
.850	.4590
.875	.4590
.900	.4590
.925	.4590
.950	.4590
.975	.4590
.000	.7096
.025	-1.079
.050	-1.1076
.075	-1.1291
.100	-1.0955
.125	-1.1513
.150	-1.1525
.175	-1.1595
.200	-1.1525
.225	-1.1595
.250	-1.1525
.275	-1.1595
.300	-1.1525
.3170	.4590
.350	.4590
.375	.4590
.400	.4590
.425	.4590
.450	.4590
.475	.4590
.500	.4590
.525	.4590
.550	.4590
.575	.4590
.600	.4590
.625	.4590
.650	.4590
.675	.4590
.700	.4590
.725	.4590
.750	.4590
.775	.4590
.800	.4590
.825	.4590
.850	.4590
.875	.4590
.900	.4590
.925	.4590
.950	.4590

$$\alpha_{ph} = 3.1 = 4.039 \quad \beta_{\alpha} = 2.1 = 7.877 \quad MACH = 7.877 \quad \rho = .59636 \quad 0 = .59421 \quad p = .2386.7 \quad RN/L = 4.8141$$

SECTION 1: VERTICAL

X/C	CP
.000	-1.3517
.025	-1.2355
.050	-1.2100
.075	-1.1521
.100	-1.1523
.125	-1.1593
.150	-1.1523
.175	-1.1593
.200	-1.1523
.225	-1.1593
.250	-1.1523
.275	-1.1593
.300	-1.1523
.3170	.4590
.350	.4590
.375	.4590
.400	.4590
.425	.4590
.450	.4590
.475	.4590
.500	.4590
.525	.4590
.550	.4590
.575	.4590
.600	.4590
.625	.4590
.650	.4590
.675	.4590
.700	.4590
.725	.4590
.750	.4590
.775	.4590
.800	.4590
.825	.4590
.850	.4590
.875	.4590
.900	.4590
.925	.4590
.950	.4590
.000	-1.2357
.025	-1.1522
.050	-1.1594
.075	-1.1522
.100	-1.1594
.125	-1.1522
.150	-1.1594
.175	-1.1522
.200	-1.1594
.225	-1.1522
.250	-1.1594
.275	-1.1522
.300	-1.1594
.3170	.4590
.350	.4590
.375	.4590
.400	.4590
.425	.4590
.450	.4590
.475	.4590
.500	.4590
.525	.4590
.550	.4590
.575	.4590
.600	.4590
.625	.4590
.650	.4590
.675	.4590
.700	.4590
.725	.4590
.750	.4590
.775	.4590
.800	.4590
.825	.4590
.850	.4590
.875	.4590
.900	.4590
.925	.4590
.950	.4590

$$\alpha_{ph} = 3.1 = 4.039 \quad \beta_{\alpha} = 2.1 = 7.877 \quad MACH = 7.877 \quad \rho = .59636 \quad 0 = .59421 \quad p = .2386.7 \quad RN/L = 4.8141$$

SECTION 1: VERTICAL

X/C	CP
.000	-1.7786
.025	-1.337
.050	-1.382
.075	-1.1519
.100	-1.3557
.125	-1.2006
.150	-1.3052
.175	-1.2180
.200	-1.3564
.225	-1.3170
.250	-1.3170
.275	-1.3170
.300	-1.3170
.3170	.4590
.350	.4590
.375	.4590
.400	.4590
.425	.4590
.450	.4590
.475	.4590
.500	.4590
.525	.4590
.550	.4590
.575	.4590
.600	.4590
.625	.4590
.650	.4590
.675	.4590
.700	.4590
.725	.4590
.750	.4590
.775	.4590
.800	.4590
.825	.4590
.850	.4590
.875	.4590
.900	.4590
.925	.4590
.950	.4590
.000	-1.2357
.025	-1.1522
.050	-1.1594
.075	-1.1522
.100	-1.1594
.125	-1.1522
.150	-1.1594
.175	-1.1522
.200	-1.1594
.225	-1.1522
.250	-1.1594
.275	-1.1522
.300	-1.1594
.3170	.4590
.350	.4590
.375	.4590
.400	.4590
.425	.4590
.450	.4590
.475	.4590
.500	.4590
.525	.4590
.550	.4590
.575	.4590
.600	.4590
.625	.4590
.650	.4590
.675	.4590
.700	.4590
.725	.4590
.750	.4590
.775	.4590
.800	.4590
.825	.4590
.850	.4590
.875	.4590
.900	.4590
.925	.4590
.950	.4590

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TABULATED PRESSURE DATA - OA148 (ANES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

MACH = .59626 Q = 593.97 P = 2386.7 RNL = 4.8175

SECTION 1 - VERTICAL

Z-EV .1520 .3170 .4590 .6020 .6970 .8390 .9250

Y/CY

Z-EV	Y/CY	BETA (4)	MACH	Q	P	RNL	Y/CY
.1520	.1980	-.1114	-.3365	-.5866	-.5782		
.1525	.14550	-.7435	-.8980	-.7875	-.7196		
.1530	.14270	-.7186	-.9154	-.7740	-.6680		
.1535	.15554	-.3512	-.7896	-.7839	-.6438		
.1540	.13512	-.3647	-.3930	-.8052	-.5893		
.1545	.14110	-.3460	-.4167	-.3912	-.4705		
.1550	.12816	-.2693	-.4618	-.4370	-.4356		
.1555	.12236	-.3265	-.3875	-.2858	-.3379		
.1560	.12659	-.2659	-.4445	-.3955	-.3843		

MACH = .8167 P = 2386.7 RNL = 4.8175

SECTION 1 - VERTICAL

Z-EV .1550 .3170 .4590 .6020 .6970 .8390 .9250

Y/CY

Z-EV	Y/CY	BETA (5)	MACH	Q	P	RNL	Y/CY
.1520	.2325	-.8326	-.1033	-.9769	-.8314		
.1525	.8351	-.12355	-.1033	-.8366	-.6442		
.1530	.9136	-.11373	-.0510	-.8225	-.6218		
.1535	.1641	-.12213	-.1008	-.8054	-.5900		
.1540	.1561	-.12213	-.1008	-.7594	-.5528		
.1545	.1561	-.12213	-.1008	-.6403	-.4607		
.1550	.14657	-.3958	-.7632	-.6337	-.5906		
.1555	.14657	-.3958	-.4824	-.5424	-.4873		
.1560	.13552	-.3182	-.3866	-.4876	-.4485		

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

(XEBV33)

ALPHA (1) = -.41114

BETA (3) =

4.277

MACH =

1.3952

Q =

599.12

P =

439.71

RNL =

2.9043

SECTION : 1) VERTICAL

DEPENDENT VARIABLE CP

Z'37 .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/C

.000	.7593	.6634	.6122	.5498	.4622
.125	.0994	-.0730	-.2599	-.3806	-.2932
.150	.1140	-.0915	-.2996	-.3832	-.2659
.175	.2120	.0328	-.0317	-.3195	-.1115
.200	.2639	.0682	-.0317	.1853	.0287
.225	.0317	.0113	.3145	.4196	.3442
.250	.2944	-.2944	.4186	.4665	-.1167
.275	-.3833	.1639	.4653	.4366	.3819
.300	-.3335	.2250	.3871	.2659	-.1989
.325	.1424	.1424	.2943	.3929	.2136
					.2610

A_P-A (2) = -.049 BETA (1) = -3.865 MACH = 1.3944

SECTION : 1) VERTICAL

DEPENDENT VARIABLE CP

Z'37 .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/C

.000	.7180	.5659	.5720	.5673	.5605
.125	.5242	.4119	.3347	.4564	.5452
.150	.5238	.4117	.2828	.4784	.5334
.175	.4716	.3112	.3147	.4939	.4796
.200	.2115	.2115	.2741	.5287	.4515
.225	.1468	.1468	.6285	.5559	.5015
.250	.1275	.1275	.6298	.5999	-.1874
.275	.2293	.2293	.5753	.5346	.4675
.300	.2628	.2628	.4231	.4547	.2675
					-.33318

ALPHA (2) = -.046 BETA (2) = .181 MACH = 1.3944

SECTION : 1) VERTICAL

DEPENDENT VARIABLE CP

Z'37 .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/C

.000	.7597	.6703	.6242	.5700	.4727
.125	.2254	.1203	-.0183	-.0441	-.0638
.150	.2252	.1213	.0112	-.0185	-.0267
.175	.1252	.1213	.1625	.1618	.3402
.200	.1250	.1213	.1334	.4239	.3870
.225	.2145	.1483	.1253	.5025	.4427
.250	.1963	.1483	.1559	.5489	.4427
.275	.1963	.1483	.1559	.4638	.4427
.300	.1424	.1424	.3243	.3853	.2791
					.3263

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) -14CA/B/C/R ORG VERTICAL

(XEBV33) ALPHA (31) = 3.895 BETA (31) = 4.246 MACH = 1.3948 Q = 599.42 P = 440.18 RNL = 2.9147

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .5673 .5375 .4553 .3771 .2867
.025 -.1142 -.1572 -.3445 -.4823 .4743
.050 -.1242 -.1419 -.3731 -.4773 -.4504
.150 -.1396 -.1359 -.1499 -.4773 -.4112
.300 -.2992 -.0125 -.1029 -.3655 -.0587
.520 -.0749 -.1151 -.1026 -.0981 .0587
.685 -.3744 -.1495 -.1641 .2026 .2825 .2416
.775 -.3525 -.0987 -.2277 .3321 .3232 .3489 .1752
.900 .0251 .1629 .2461 .2371 .1734 .3274

ALPHA (41) = 7.947 BETA (11) = -3.865 MACH = 1.3944 Q = 599.72 P = 440.65 RNL = 2.9146

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .5936 .4855 .4239 .3772 .3780
.025 .2644 .2654 .2310 .2393 .3255
.050 .3515 .3044 .2355 .2379 .3448
.150 .1251 .2124 .1779 .2702 .3556
.300 .1520 .1246 .1305 .4489 .3274
.520 .2044 .0354 .4500 .4379 .3891
.685 .14151 .3232 -.1813 .4836 .4794 .2199
.775 .3287 .2419 .3965 .4249 .3753 .2293
.900 .1737 .2929 .3463 .3302 .2153 .3908

ALPHA (41) = 7.946 BETA (21) = .185 MACH = 1.3944 Q = 599.72 P = 440.65 RNL = 2.9146

SECTION (1) VERT.CAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .009 .6835 .5252 .4418 .3928 .3091
.025 .1955 .0286 .0909 .1109 .1675
.050 .3404 .2089 .0977 .1121 .1269
.150 .2945 .1129 .0557 .0427 .0603
.300 .1131 .0345 .0238 .2427 .2541
.520 .8403 -.0541 .3288 .3535 .3219
.595 .14253 .2154 -.1704 .4096 .4344 .2212
.775 .2499 .1292 .2550 .3187 .3494 .2590
.900 .0518 .0518 .1289 .2803 .2690 .1820 .3797

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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$\Delta\text{LPHA} (5) = 11.860 \quad \text{BETA} (3) = 4.253 \quad \text{MACH} = 1.3955 \quad Q = 599.73 \quad P = 439.94 \quad RN/L = 2.9121$

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

$\Delta\text{LPHA} (6) = 15.849 \quad \text{BETA} (1) = -3.830 \quad \text{MACH} = 1.3950 \quad Q = 599.93 \quad P = 440.41 \quad RN/L = 2.9147$

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

$\Delta\text{LPHA} (6) = 15.859 \quad \text{BETA} (2) = -186 \quad \text{MACH} = 1.3950 \quad Q = 599.93 \quad P = 440.41 \quad RN/L = 2.9147$

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL
(XEBY733)

DEPENDENT VARIABLE CP

X/CV .000 .7650 .5142 .3317 .2474 .2299
.025 -.1940 .1329 .1439 .1392 .1464
.050 -.0464 .2632 .1439 .1395 .1643
.150 .2343 .1135 .0851 .1184 .2269
.320 -.0079 -.0129 .0334 .2100 .2601
.635 -.0993 -.1153 .0859 .3673 .3248
.715 -.4259 -.2933 -.1895 .4058 .4012 .2471
.930 -.3678 .2535 .3417 .3473 .3560 .3090 .2622
.930 -.1641 .2762 .2934 .2712 .1783 .4255

X/CV .000 .6982 .4970 .3316 .2463 .1889
.025 .0329 -.0201 -.1450 .1583 .2105
.050 .2930 .1528 -.1580 -.1710 .1753
.150 .2764 .0608 -.0240 -.0322 .0425
.300 .0757 -.0334 -.0500 .0786 .1357
.525 -.1147 -.1292 .2125 .2307 .2094
.685 -.4523 .1434 -.1838 .3125 .3126 .2580
.775 -.3993 .0321 .1784 .2293 .2449 .2873
.930 .0149 .1221 .1713 .1801 .1279 .4132

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

ALPHA (6)	15.851	BETA (3)	=	4.283	MACH	=	1.3950	Q	=	599.93	P	=	440.41	RNU/L	=	2.9.47
SECTION /	VERTICAL			DEPENDENT VARIABLE CP												(XEBN733)
Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250									
X, CV	.000	.7628	.5247	.2880	.1654	.1278										
	.025	.1227	-.1584	-.3580	-.4629	-.4376										
	.050	.2466	-.1233	-.3884	-.4691	-.4376										
	.150	.2824	.0124	-.2114	-.2855	-.3989										
	.200	.0731	-.0742	-.1612	-.0954	-.0789										
	.520	-.1400	-.1776	.0771												
	.585	-.4513	.0568	-.1879	.2357	.1434										
	.775	-.3770	.0844	-.0915	.1680	.1602										
	.955		-.0740	.0311	.0969	.1224										

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TABULATED PRESSURE DATA - OA114B (AMES 11-073-1)

AMES 11-073(OA14B) -14DA/B/C/R ORB VERTICAL

REFERENCE DATA

SPEC	X ⁰	Y ⁰	Z ⁰	X ^{MPP}	Y ^{MPP}	Z ^{MPP}	RUDDER = 0.000	BDFLAP = 16.300	SPDRK = 35.000
LREF	.474	.8230	.0000	.1076	.6800	.IN. X0	R-ELVN = 10.000	L-ELVN = .000	MACH = 1.250
BREF	.936	.0580	.IN.	.0000	.0000	.IN. Y0			
SCALE	.0300			.375	.0000	.IN. Z0			
ALPHA (1) = -4.041									
SECTION (1) VERTICAL				BETA (1) = -3.845	MACH = 1.2480	0 = 600.05	P = 550.40	RNL = 3.0174	
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CV									
	.000	.765	.6287	.6023	.4195	.6443	.5634		
	.025	.5950	.4618	.6023	.4124	.5924	.5852		
	.050	.5935	.4555	.6023	.4115	.5901	.5651		
	.150	.4815	.2648	.6023	.3642	.5386	.4890		
	.300	.3313	.2806	.6023	.4415	.5266	.4407		
	.500	.1832	.1909	.6023	.6379	.5188	.4081		
	.650	.3397	.4821	.1762	.6389	.6236	.5613	.2879	
	.775	.2759	.3930	.5187	.5337	.5162	.3960	.3079	
	.900	.3223	.4116	.4159	.3784	.1695	.1695	.4225	
ALPHA (1) = -4.041				BETA (2) = 1.32	MACH = 1.2480	0 = 600.05	P = 550.40	RNL = 3.0174	
SECTION (1) VERTICAL									
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CV									
	.000	.8135	.6919	.6659	.0367	.6484	.6764		
	.025	.2799	.3835	.6659	.0219	.0988	.1769		
	.050	.4413	.2971	.6659	.1682	.1508	.2670		
	.150	.3802	.2177	.6659	.1722	.3838	.3824		
	.300	.2248	.1469	.6659	.5648	.4383	.3841		
	.500	.0536	.0613	.6659	.5894	.5039	.3900		
	.650	.4477	.3606	.1743	.5719	.5521	.2832		
	.775	.3451	.2784	.4504	.4815	.3727	.3136		
	.900	.2172	.3502	.3757	.3479	.1446	.3910		

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(XEBV34) (13 AUG 75)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6774

SECTION 1) VERTICAL		AMES 11-07310A14B -14DA/B/C/R ORB VERTICAL				(XE8V34)	
Z/BY	X/CY	ALPHA (1) = -4.051	BETA (3) = 4.275	MACH = 1.2480	Q = 600.05	P = 550.40	RN/L = 3.0174
DEPENDENT VARIABLE CP							
.1580	.3170	.4590	.6020	.6970	.8390	.9250	
SECTION 2) VERTICAL		AMES 11-07310A14B -14DA/B/C/R ORB VERTICAL				(XE8V34)	
Z/BY	X/CY	ALPHA (2) = -0.032	BETA (1) = -3.867	MACH = 1.2476	Q = 600.19	P = 550.87	RN/L = 3.0137
DEPENDENT VARIABLE CP							
.1580	.3170	.4590	.6020	.6970	.8390	.9250	
SECTION 3) VERTICAL		AMES 11-07310A14B -14DA/B/C/R ORB VERTICAL				(XE8V34)	
Z/BY	X/CY	ALPHA (2) = -0.029	BETA (2) = .184	MACH = 1.2476	Q = 600.19	P = 550.87	RN/L = 3.0137
DEPENDENT VARIABLE CP							
.1580	.3170	.4590	.6020	.6970	.8390	.9250	

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

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ALPHA (2) = -.035 BETA (3) = 4.251 MACH = 1.2476 0 = 600.19 P = 550.87 RN/L = 3.0137
 SECTION 1 (VERTICAL)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6817	.5501	.4960	.4221	.3337
.025	-.0249	-.2006	-.3761	-.4005	-.1760	
.050	.0210	-.2013	-.4269	-.3917	-.1545	
.150	.1376	-.0694	-.1629	-.2998	-.1510	
.320	.0930	-.0155	-.1347	-.0879	-.1359	
.520	-.0732	-.1133	.2520	.3850	.0472	
.885	-.5033	.1887	-.1630	.3510	.4311	-.1984
.775	-.3800	.1131	.2753	.3259	.3067	-.2701
.900	.0282	.1845	.2676	.2195	.0939	-.3827

ALPHA (3) = 3.926 BETA (1) = -3.871 MACH = 1.2463 0 = 599.48 P = 551.33 RN/L = 3.0145
 SECTION 1 (VERTICAL)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6241	.4918	.4417	.4596	.4167
.025	-.3951	.3087	.2488	.3859	.4365	
.050	.4190	.3140	.2540	.3890	.4197	
.150	-.3211	.2201	.1883	.3878	.3567	
.300	.1912	.1324	.1652	.4034	.3205	
.520	.0309	.0274	.5137	.4277	.3545	
.685	-.5235	.3087	-.1755	.5185	.4656	-.3150
.775	-.3441	.2339	.3873	.4154	.4069	.3270
.900	.1620	.1820	.3076	.3240	.2890	.1200

ALPHA (3) = 3.924 BETA (2) = 1.180 MACH = 1.2463 0 = 599.48 P = 551.33 RN/L = 3.0145
 SECTION 1 (VERTICAL)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.7117	.5546	.4977	.4435	.3560
.025	.1694	-.0136	-.1285	-.1531	-.0291	
.050	.3402	.1971	-.0985	-.1404	-.0113	
.150	.2789	.1050	.0409	.1144	.2461	
.300	.1157	.1239	.0182	.3252	.2636	
.520	-.0500	-.2589	.3957	.3815	.3047	
.685	-.5176	-.2445	-.1721	.4376	.4411	-.3222
.775	.1524	.1323	.2899	.3560	.3711	.3015
.900	.0650	.0550	.2130	.2758	.2573	.0917

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6776

ALPHA (3) = 3.934 BETA (3) = 4.244 MACH = 1.2463 O = 599.48 P = 551.33 RN/L = 3.0145
 SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP							(XEV34)	
Z-BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CY	.6124	.4959		.4131		.3370	.2248	
	-.0583	.2332		-.4118		-.5150	-.3746	
	.0295	-.2178		-.4588		-.5103	-.3599	
	.050			.2196		-.4326	-.2891	
	.1097	-.0973		-.1707		.0473	-.1869	
	.0442	-.0617		.1963		.2608	.2815	
	.029	-.1765				.2911	.2610	
	.1458			.3111				
	.4234	-.1179		.3071				
	.175	.2552		.2653				
	.3553			.2050				
	.900	-.0291		.1279				
				.2050				
ALPHA (4) = 7.989 BETA (1) = -3.866 MACH = 1.2474 O = 600.07 P = 550.87 RN/L = 3.0135 SECTION 1 INVERTICAL								
Z-BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CY	.6463	.5339		.3730		.3470	.3369	
	-.3450	.2367		-.1760		.2542	.3612	
	.025	.3350		-.2578		.2780	.3501	
	.050	-.3948		.1618		.3165	.2923	
	.150	.2710		.1518		.3560	.2616	
	.250	-.1336		.1221				
	.350	-.0156		.0914				
	.450	-.1251		.4507				
	.550	-.5131		.4625				
	.650	.2658		.1818				
	.750	-.4310		.3219				
	.850	.1992		.3579				
	.950	-.1178		.2505				
ALPHA (4) = 7.987 BETA (2) = .186 MACH = 1.2474 O = 600.07 P = 550.87 RN/L = 3.0135 SECTION 1 INVERTICAL								
Z-BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CY	.6589	.4970		.4113		.3468	.2407	
	-.1225	.1756		-.0400		-.1771	-.2065	
	.150	.3244		.1475		-.1570	-.1886	
	.2429	.0480		-.0490		-.0469	-.1775	
	.333	-.0499		-.0357		-.0401	-.0169	
	.423	-.1107		-.1260				
	.523	-.5359		.1688				
	.623	.0885		.1735				
	.723	-.2552		.2215				
	.823	.0594		.1522				

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL.

ALPHA (4) = 7.988 BETA (3) = 4.237 MACH = 1.2474 Q = 600.07 P = 550.87 RN/L = 3.0135

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9650
X/CV	.6401	.4615		.3390		.2492	.1425
	.025	.0859	-.2377	-.4400	-.5901	-.5483	
	.050	.1368	-.2179	-.4839	-.5832	-.5344	
	.150	.1670	-.0734	-.2501	-.3700	-.3347	
	.300	.0212	-.1159	-.1832	-.0287	-.0588	
	.520	.1893	-.2195	.1640	.2815	.1706	.1142
	.685	.4428	.0609	-.1723	.2058	.2535	.2262
	.775	.3810	-.0019	.1317	.2091	.2096	.2326
	.900		-.0767	.0670	.1470	.1423	.0668

ALPHA (5) = 11.921 BETA (1) = -3.856 MACH = 1.2455 Q = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6698	.4278		.3130		.2592	.2628
	.020	.2822	.1901	.1226	.1648	.2993	
	.025	.3523	.2092	.1242	.1759	.2930	
	.150	.2199	.1072	.0695	.2502	.2422	
	.220	.0430	.0043	.0350	.3083	.2092	
	.625	.5273	.2614	-.1836	.4152	.3144	.2581
	.775	.4225	.1776	.2884	.3071	.3157	.3152
	.900		.902	.2213	.2395	.2030	.0740

ALPHA (5) = 11.932 BETA (2) = .189 MACH = 1.2455 Q = 599.75 P = 552.28 RN/L = 3.0144

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6670	.4457		.3422		.2676	.1870
	.025	.1566	-.3656	-.1988	-.2236	-.2716	
	.050	.2027	.1177	-.1698	-.2225	-.2317	
	.150	.2254	.0126	-.0576	-.0654	-.1035	
	.220	.0222	-.0685	-.0854	-.1899	.1578	
	.520	-.1452	-.1577	-.2525	-.2596	.2040	
	.685	-.5470	.1225	-.1778	.3011	.3288	-.3377
	.775	.3275	.0501	.1695	.2263	.2556	.2227
	.900		-.0231	.1101	.1695	.1637	.0459

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(XEBV34)

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

AMES 11-073(04148) -140AV/B/C/R ORB VERTICAL

REFERENCE DATA

REF	2530.000 SD.FT.	AIRSP	1076.6800 IN. X0	RUDDER =	10.000 SPDRK =	(XEB035) (13 AUG 75)	
REF	.47-.600 IN.	VYRSP	.0000 IN. Y0	BDFLAP =	16.300 L-FLVN =	PAGE 6779	
REF	.955.025 IN.	ZHSP	.375.0000 IN. Z0	R-ELVN =	10.000 MACH =		
ALPHA (1) = -4.054	BETA (1) = -3.846	MACH = 1.1012	Q = 599.90	P = 706.74	RNL = 3.1771	PARAMETRIC DATA	
SECTION 1 VERTICAL		DEPENDENT VARIABLE CP					
Z/BV	.1580 .3170 .4590	.6020 .6970 .8390 .9250					
X/CV	.5837 .5481 .3544 .5271 .5212 .3665 .3910 .2229 .1937 .1401 .4075 .1628 .1629 .3295 .2597	.5389 .3693 .3670 .3466 .3802 .5412 .5381 .5204 .4176 .4012 .2944 .2973 .2944 .2973	.5632 .5225 .5036 .4464 .4242 .3894 .4152 .4494 .4236 .2580 .24723 .0068 .5532	.4682 .4944 .4732 .3858 .3694 .2767 .2767 .4236 .4236 .4723 .5532			
ALPHA (1) = -4.062	BETA (2) = .195	MACH = 1.1012	Q = 599.90	P = 706.74	RNL = 3.1771		
SECTION 1 VERTICAL		DEPENDENT VARIABLE CP					
Z/BV	.1580 .3170 .4590	.6020 .6970 .8390 .9250					
X/CV	.7434 .6152 .5231 .5503 .5538 .1954 .2761 .1220 .1197 .0555 .0351 .5501 .2501 .7455 .2455 .2506 .2506	.5071 .1446 .0073 .0818 .2526 .4649 .2093 .5017 .3933 .3758 .3751 .1551	.6428 .1161 .2571 .3061 .3476 .2599 .4811 .4418 .3710 .2345 .4594 .2174	.6219 .1289 .2133 .2917 .2799 .3996 .2659 .4418 .4136 .4594 .5145 .0123			

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TABULATED PRESSURE DATA - OAI49 (AMES 11-073-1)

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AMES 11-07310A1481 - 140AV/B/C/R ORB VERTICAL

ALPHA (2) = - .024 BETA (3) = 4.249 MACH = 1.0993 Q = 599.08 P = 708.12 RNL = 3.1793

SECTION: 11 VERTICAL

Z/BV -1580 -3170 .4590 .6020 .6970 .8390 .9250

X/CY

X/CY	6247	6726	4172	5282	5658	2894	3485	1275
.000								
.025	-.0576	-.3551	-.5282	-.5658	-.2894	-.3485	-.1067	
.050	-.0252	-.3156						
.150	-.0804	-.1348						
.250	-.0236	-.1312						
.500	-.1395	-.2235						
.850	-.5285	-.1009	-.1781	.2932	.3460	.4021	.2740	
1.200	-.3481	-.0460	.2273	.2713	.2536	.2417	.1918	
1.500	-.0464	.1393	.1839	.1091	.0103	.4241	.3520	

ALPHA (3) = 3.952 BETA (1) = -3.863 MACH = 1.0983 Q = 598.70 P = 709.06 RNL = 3.1785

SECTION: 11 VERTICAL

Z/BV -1580 -3170 .4590 .6020 .6970 .8390 .9250

X/CY

X/CY	5832	1305	3726	1616	1686	3982	3163	3639
.000								
.025	3.455	.2109						
.050	3745	.2269						
.100	2535	.1321						
.200	1335	.1325						
.400	1455							
.600	3768							
.850	6302							
1.000	6303							
1.200	3227							
1.500	116	.2117	.2384	.1651	.0324	.5500		

ALPHA (3) = 3.952 BETA (2) = -189 MACH = 1.0983 Q = 598.70 P = 709.06 RNL = 3.1785

SECTION: 11 VERTICAL

Z/BV -1580 -3170 .4590 .6020 .6970 .8390 .9250

X/CY

X/CY	6763	4361	4438	4154	4526			
.000								
.025	1.425	-.1085	-.2399	-.0876	-.0117			
.050	284	.1021	-.1538	-.0299	.1052			
.100	577	.022						
.200	335	-.0574						
.400	1162	-.1782						
.600	1654	-.1651						
1.000	2617							
1.200	3222							
1.500	116	.1763	.1418	.0656	-.5493			

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TABULATED PRESSURE DATA - OAIW-B (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

$\alpha_{\text{crit}} = 2.550$ $\beta_{\text{crit}} = 1.31$ $\text{MACH} = 4.243$ $\text{P} = 598.70$ $\text{PA/L} = 3.1785$

DEPENDENT VARIABLE CP

$\beta/\beta_{\text{crit}}$	$\alpha/\alpha_{\text{crit}}$	$\beta/\beta_{\text{crit}}$	$\alpha/\alpha_{\text{crit}}$	MACH	P	PA/L
1.000	1.000	1.000	1.000	4.243	598.70	3.1785
1.020	1.020	1.020	1.020	4.226	599.30	3.1785
1.040	1.040	1.040	1.040	4.204	599.83	3.1785
1.060	1.060	1.060	1.060	4.184	600.23	3.1785
1.080	1.080	1.080	1.080	4.164	600.52	3.1785
1.100	1.100	1.100	1.100	4.144	600.72	3.1785
1.120	1.120	1.120	1.120	4.124	600.83	3.1785
1.140	1.140	1.140	1.140	4.104	600.86	3.1785
1.160	1.160	1.160	1.160	4.084	600.83	3.1785
1.180	1.180	1.180	1.180	4.064	600.72	3.1785
1.200	1.200	1.200	1.200	4.044	600.52	3.1785
1.220	1.220	1.220	1.220	4.024	600.23	3.1785
1.240	1.240	1.240	1.240	4.004	599.83	3.1785
1.260	1.260	1.260	1.260	3.984	599.30	3.1785
1.280	1.280	1.280	1.280	3.964	598.70	3.1785
1.300	1.300	1.300	1.300	3.944	597.97	3.1785
1.320	1.320	1.320	1.320	3.924	597.14	3.1785
1.340	1.340	1.340	1.340	3.904	596.21	3.1785
1.360	1.360	1.360	1.360	3.884	595.18	3.1785
1.380	1.380	1.380	1.380	3.864	594.05	3.1785
1.400	1.400	1.400	1.400	3.844	592.82	3.1785
1.420	1.420	1.420	1.420	3.824	591.50	3.1785
1.440	1.440	1.440	1.440	3.804	590.17	3.1785
1.460	1.460	1.460	1.460	3.784	588.74	3.1785
1.480	1.480	1.480	1.480	3.764	587.21	3.1785
1.500	1.500	1.500	1.500	3.744	585.68	3.1785
1.520	1.520	1.520	1.520	3.724	584.05	3.1785
1.540	1.540	1.540	1.540	3.704	582.32	3.1785
1.560	1.560	1.560	1.560	3.684	580.50	3.1785
1.580	1.580	1.580	1.580	3.664	578.68	3.1785
1.600	1.600	1.600	1.600	3.644	576.85	3.1785
1.620	1.620	1.620	1.620	3.624	574.92	3.1785
1.640	1.640	1.640	1.640	3.604	573.00	3.1785
1.660	1.660	1.660	1.660	3.584	571.07	3.1785
1.680	1.680	1.680	1.680	3.564	569.14	3.1785
1.700	1.700	1.700	1.700	3.544	567.11	3.1785
1.720	1.720	1.720	1.720	3.524	565.08	3.1785
1.740	1.740	1.740	1.740	3.504	562.95	3.1785
1.760	1.760	1.760	1.760	3.484	560.82	3.1785
1.780	1.780	1.780	1.780	3.464	558.68	3.1785
1.800	1.800	1.800	1.800	3.444	556.50	3.1785
1.820	1.820	1.820	1.820	3.424	554.32	3.1785
1.840	1.840	1.840	1.840	3.404	552.14	3.1785
1.860	1.860	1.860	1.860	3.384	550.00	3.1785
1.880	1.880	1.880	1.880	3.364	547.82	3.1785
1.900	1.900	1.900	1.900	3.344	545.68	3.1785
1.920	1.920	1.920	1.920	3.324	543.50	3.1785
1.940	1.940	1.940	1.940	3.304	541.32	3.1785
1.960	1.960	1.960	1.960	3.284	539.14	3.1785
1.980	1.980	1.980	1.980	3.264	536.92	3.1785
2.000	2.000	2.000	2.000	3.244	534.71	3.1785
2.020	2.020	2.020	2.020	3.224	532.50	3.1785
2.040	2.040	2.040	2.040	3.204	530.32	3.1785
2.060	2.060	2.060	2.060	3.184	528.14	3.1785
2.080	2.080	2.080	2.080	3.164	525.92	3.1785
2.100	2.100	2.100	2.100	3.144	523.71	3.1785
2.120	2.120	2.120	2.120	3.124	521.50	3.1785
2.140	2.140	2.140	2.140	3.104	519.32	3.1785
2.160	2.160	2.160	2.160	3.084	517.14	3.1785
2.180	2.180	2.180	2.180	3.064	514.92	3.1785
2.200	2.200	2.200	2.200	3.044	512.71	3.1785
2.220	2.220	2.220	2.220	3.024	510.50	3.1785
2.240	2.240	2.240	2.240	3.004	508.32	3.1785
2.260	2.260	2.260	2.260	2.984	506.14	3.1785
2.280	2.280	2.280	2.280	2.964	503.92	3.1785
2.300	2.300	2.300	2.300	2.944	501.71	3.1785
2.320	2.320	2.320	2.320	2.924	509.50	3.1785
2.340	2.340	2.340	2.340	2.904	507.32	3.1785
2.360	2.360	2.360	2.360	2.884	505.14	3.1785
2.380	2.380	2.380	2.380	2.864	502.92	3.1785
2.400	2.400	2.400	2.400	2.844	500.71	3.1785
2.420	2.420	2.420	2.420	2.824	498.50	3.1785
2.440	2.440	2.440	2.440	2.804	496.32	3.1785
2.460	2.460	2.460	2.460	2.784	494.14	3.1785
2.480	2.480	2.480	2.480	2.764	491.92	3.1785
2.500	2.500	2.500	2.500	2.744	489.71	3.1785
2.520	2.520	2.520	2.520	2.724	487.50	3.1785
2.540	2.540	2.540	2.540	2.704	485.32	3.1785
2.560	2.560	2.560	2.560	2.684	483.14	3.1785
2.580	2.580	2.580	2.580	2.664	480.92	3.1785
2.600	2.600	2.600	2.600	2.644	478.71	3.1785
2.620	2.620	2.620	2.620	2.624	476.50	3.1785
2.640	2.640	2.640	2.640	2.604	474.32	3.1785
2.660	2.660	2.660	2.660	2.584	472.14	3.1785
2.680	2.680	2.680	2.680	2.564	470.00	3.1785
2.700	2.700	2.700	2.700	2.544	467.82	3.1785
2.720	2.720	2.720	2.720	2.524	465.68	3.1785
2.740	2.740	2.740	2.740	2.504	463.50	3.1785
2.760	2.760	2.760	2.760	2.484	461.32	3.1785
2.780	2.780	2.780	2.780	2.464	459.14	3.1785
2.800	2.800	2.800	2.800	2.444	456.92	3.1785
2.820	2.820	2.820	2.820	2.424	454.71	3.1785
2.840	2.840	2.840	2.840	2.404	452.50	3.1785
2.860	2.860	2.860	2.860	2.384	450.32	3.1785
2.880	2.880	2.880	2.880	2.364	448.14	3.1785
2.900	2.900	2.900	2.900	2.344	445.92	3.1785
2.920	2.920	2.920	2.920	2.324	443.71	3.1785
2.940	2.940	2.940	2.940	2.304	441.50	3.1785
2.960	2.960	2.960	2.960	2.284	439.32	3.1785
2.980	2.980	2.980	2.980	2.264	437.14	3.1785
3.000	3.000	3.000	3.000	2.244	434.92	3.1785
3.020	3.020	3.020	3.020	2.224	432.71	3.1785
3.040	3.040	3.040	3.040	2.204	430.50	3.1785
3.060	3.060	3.060	3.060	2.184	428.32	3.1785
3.080	3.080	3.080	3.080	2.164	426.14	3.1785
3.100	3.100	3.100	3.100	2.144	423.92	3.1785
3.120	3.120	3.120	3.120	2.124	421.71	3.1785
3.140	3.140	3.140	3.140	2.104	419.50	3.1785
3.160	3.160	3.160	3.160	2.084	417.32	3.1785
3.180	3.180	3.180	3.180	2.064	415.14	3.1785
3.200	3.200	3.200	3.200	2.044	412.92	3.1785
3.220	3.220	3.220	3.220	2.024	410.71	3.1785
3.240	3.240	3.240	3.240	2.004	408.50	3.1785
3.260	3.260	3.260	3.260	1.984	406.32	3.1785
3.280	3.280	3.280	3.280	1.964	404.14	3.1785
3.300	3.300	3.300	3.300	1.944	401.92	3.1785
3.320	3.320	3.320	3.320	1.924	400.71	3.1785
3.340	3.340	3.340	3.340	1.904	398.50	3.1785
3.360	3.360	3.360	3.360	1.884	396.32	3.1785
3.380	3.380	3.380	3.380	1.864	394.14	3.1785
3.400	3.400	3.400	3.400	1.844	391.92	3.1785
3.420	3.420	3.420	3.420	1.824	389.71	3.1785
3.440	3.440	3.440	3.440	1.804	387.50	3.1785
3.460	3.460	3.460	3.460	1.784	385.32	3.1785
3.480	3.480	3.480	3.480	1.764	383.14	3.1785
3.500	3.500	3.500	3.500	1.744	380.92	3.1785
3.520	3.520	3.520	3.520	1.724	378.71	3.1785
3.540	3.540	3.540	3.540	1.704	376.50	3.1785
3.560	3.560	3.560	3.560	1.684	374.32	3.1785
3.580	3.580	3.580	3.580	1.664	372.14	3.1785
3.600	3.600	3.600	3.600	1.644	370.00	3.1785
3.620	3.620	3.620	3.620	1.624	367.82	3.1785
3.640	3.640	3.640	3.640	1.604	365.68	3.1785
3.660	3.660	3.660	3.660	1.584	363.50	3.1785
3.680	3.					

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

ALPHA (4) = 8.037 BETA (3) = 4.237 MACH = 1.0987 Q = 598.57 P = 708.35 RNL = 3.1769

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.5955	.3693	.2577	.1646	.0444
.025	-.0408	-.3833	-.6324	-.6473	-.4261	
.050	.0256	-.3339	-.4002	-.6497	-.4086	
.150	.0625	-.1987	-.2974	-.4546	-.4060	
.300	-.1279	-.2338	-.1223	.0015	-.2640	
.520	-.3129	-.3228	.2290	.1426	.0945	
.695	-.5045	-.0057	-.1547	.1911	-.3523	
.775	-.3795	-.0820	.0898	.1561	.0966	
.900	-.0643	.0421	.0922	.0484	-.4186	

ALPHA (5) = 11.975 BETA (1) = -3.842 MACH = 1.0987 Q = 598.75 P = 708.59 RNL = 3.1753

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6418	.3572	.2245	.2245	.1189
.025	.1800	.0949	.0545	.2979	.3097	
.050	.2805	.1210	.0500	.2880	.2903	
.150	.1428	.0182	.0006	.2676	.2146	
.300	-.0462	-.0723	.0470	.2740	.1689	
.520	-.1533	-.1327	.3831	.2671	.1757	
.695	-.6533	-.2016	-.1737	.3500	.2972	
.775	-.3980	-.1331	.3136	.2652	.1589	
.900	-.1743	.2226	.1855	.1298	-.0579	

ALPHA (5) = 11.986 BETA (2) = .168 MACH = 1.0987 Q = 598.75 P = 708.59 RNL = 3.1753

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6303	.3908	.2852	.2094	.2066
.025	-.0543	-.1823	-.3203	-.3442	-.1116	
.050	.2375	-.0135	-.2621	-.3350	-.0054	
.150	.1315	-.0826	-.1582	-.0589	.0625	
.300	-.0765	-.1674	-.1802	.1569	.0881	
.520	-.2569	-.2557	.2359	.2049	.1061	
.695	-.5919	-.0630	-.1522	.2585	.4366	
.775	-.4326	-.0104	.1602	.2111	.1230	
.900	.0131	.1017	.1294	.0899	-.0919	

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DATE 14 FEB 76

TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

ALPHA (5) = 11.981		BETA (3) = 4.246	MACH = 1.0987	O = 598.75	P = 708.59	RNL = 3.1753		
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP				(XEV35)		
Z/BY	X/CY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
.000	.6286	.3517	.1959	.0798	.0529			
.025	-.0069	-.3995	-.6056	-.7272	-.5937			
.050	.0896	-.3470	-.6380	-.7135	-.5689			
.150	.0609	-.2135	-.4344	-.3828	-.5556			
.300	-.1541	-.2670	-.3235	-.1754	-.0369			
.520	-.3434	-.3689	-.0753	.1034	-.0697			
.685	-.5593	-.0479	-.1506	.1822	.1443			
.775	-.3969	-.1222	.0276	.1091	.1051	.2110	-.3246	
.300	-.1163	-.0004	.0545	.0273	.0273	.1011	-.4204	
						-.0979	-.4582	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL (XEBV36)									
SECTION 1: VERTICAL		DEPENDENT VARIABLE CP							
Z/BV	0.90	.3170	.4590	.6020	.6970	.8390	.9250		
X/CV	.000	.4720	.3406	.3553	.4248	.3345			
	.025	-.1891	-.6724	-.4928	-.1391	-.3133			
	.050	-.1223	-.6031	-.4891	-.1337	-.2892			
	.150	-.1520	-.3187	-.4433	-.0896	-.1024			
	.250	-.2471	-.3263	-.1957	-.0557	-.0576			
	.520	-.3997	.0217	.2450	.0178				
	.655	-.3237	.2107	.2289	.3293	.1314	-.0127	-.2991	
	.775	-.1893	.1117	.1941	.2184	.1352	-.0793	-.3062	
	.900	-.0201	.0280	.0485	.0050	.1745	-.1745	-.3154	
ALPHA (2) =	.342	BETA (1) =	-3.866	MACH =	.90027	0	= 600.16	P = 1057.8	RNL = 3.5774
SECTION 1: VERTICAL									
Z/BV	1.580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CV	.000	.4317	.2791	.2795	.2484	.1103			
	.025	.2904	.1755	.3252	.4003	.3989			
	.050	.2774	.1765	.3023	.3716	.3141			
	.150	.1399	.2263	.2526	.2891	.1967			
	.300	.3178	.3265	.2571	.2408	.1178			
	.520	-.1673	.1467	.3592	.1949	.0203			
	.655	-.2347	.3111	.3539	.2037	.3023			
	.775	-.2218	.2111	.2580	.1826	.0005	-.3065		
	.900	-.0349	.0874	.0503	-.0100	-.1885	-.3006		
ALPHA (2) =	.092	BETA (1) =	.183	MACH =	.90027	0	= 600.16	P = 1057.8	RNL = 3.5774
SECTION 1: VERTICAL									
Z/BV	1.580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CV	.000	.5104	.3659	.4566	.4748	.4217			
	.025	-.0180	-.3000	-.1472	.1263	.0812			
	.050	.0972	-.2686	.0658	.1598	.1254			
	.150	-.0140	-.1114	.0838	.1563	.1122			
	.300	-.1422	-.1225	.1579	.1709	.0777			
	.520	-.2716	.0852	.3228	.1882	.0456			
	.655	-.2432	.2643	.3206	.2852	.2230	-.3013		
	.775	-.1551	.1535	.2140	.1870	.1549	-.0035	-.3164	
	.900	-.3286	.0442	.0158	-.0378	-.1997	-.3032		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

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ALPHA (2) = .085 BETA (3) = 4.248 MACH = .90027 Q = 600.16 P = 1057.8 RNL = 3.5774
 SECTION 11 VERTICAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV	.000	.4177	.2615	.2718	.5340	.2669
	.025	.2823	.7403	.5436	.1548	.28E8
	.050	.2019	.6300	.5275	.1473	.2655
	.150	.1948	.3692	.4786	.1173	.1374
	.300	.3079	.4021	.2205	.0809	.0647
	.520	.4642	.0265	.2604	.0395	.1089
	.685	.2635	.1932	.3086	.1317	.2537
	.775	.2193	.1043	.1641	.1419	.0864
	.900	.0235	.0235	.0033	.0072	.2656

ALPHA (3) = 3.973 BETA (11) = -3.873 MACH = .89927 Q = 599.24 P = 1058.5 RNL = 3.5740
 SECTION 11 VERTICAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV	.000	.3752	.2171	.1702	.1400	.0033
	.025	.2282	.1331	.3026	.3710	.3164
	.050	.2204	.1348	.2818	.3421	.2814
	.150	.0919	.0603	.2334	.2627	.1733
	.320	.0233	.0052	.2407	.2133	.0881
	.520	.1818	.1409	.3388	.1669	.0089
	.685	.2392	.3074	.1735	.3208	.2790
	.775	.2269	.2133	.2396	.1908	.1509
	.900	.0922	.0733	.0208	.0352	.02033

ALPHA (3) = 3.98: BETA (2) = .185 MACH = .89927 Q = 599.24 P = 1058.5 RNL = 3.5740
 SECTION 11 VERTICAL
 Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/C	.000	.4794	.3126	.3923	.4102	.3540
	.225	-.0856	-.3492	-.1117	.1332	.0794
	.350	-.0509	-.1125	.0567	.1559	.1095
	.150	-.0615	-.1335	.0718	.1379	.0863
	.300	-.1870	-.1411	.1372	.1398	.0497
	.520	-.2901	.0256	.2893	.1585	.0197
	.685	-.2466	-.1674	.2835	.1802	.2873
	.775	-.2032	-.1454	.1895	.1533	-.3021
	.900	.026+	.026+	.0202	-.0128	-.2168

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

ALPHA (3) = 3.986 BETA (3) = 4.242 MACH = .89927 Q = 599.24 P = 1058.5 RN/L = 3.5740

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.3620	.2070	.2091	.2883	.2142
.025	-.3007	-.7634	-.4776	-.1675	-.3191
.050	-.2079	-.6938	-.4561	-.1646	-.2973
.150	-.2098	-.4379	-.4569	-.1334	-.1697
.300	-.3700	-.4393	-.2117	-.1044	-.0469
.520	-.4989	-.0367	-.2176	-.0403	-.1148
.685	-.2430	-.1987	-.1657	-.0236	-.2512
.775	-.2261	-.1060	-.1415	-.0870	-.2559
.900	-.0151	-.0195	-.0150	-.0441	-.2538

ALPHA (4) = 8.050 BETA (4) = -3.862 MACH = .89970 Q = 599.92 P = 1058.7 RN/L = 3.5781

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.3232	.1476	.1100	.0421	-.0900
.025	-.1833	-.1151	.2811	.3342	.2725
.050	.1788	.1108	.2528	.3085	.2407
.150	.6498	.0245	.2095	.2302	.1353
.300	-.0647	-.0242	.2203	.1798	.0586
.520	-.2349	-.1278	.3224	.1515	-.0355
.685	-.2733	-.3090	-.1714	.2995	.1398
.775	-.2290	.2210	.2383	.1708	-.3075
.900	-.1033	.0710	.0081	.1239	-.3127

ALPHA (4) = 9.054 BETA (2) = .184 MACH = .89970 Q = 599.92 P = 1058.7 RN/L = 3.5781

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.302	-.4420	.2515	.3372	.3384	.2692
.225	-.1189	-.3522	-.1493	.1226	.0692
.150	.0245	-.1537	.0226	.0227	.0845
.150	-.0821	-.1837	.0471	.1129	.0560
.300	-.2243	-.1738	.1205	.1120	.0150
.520	-.3189	.0520	.2693	.1212	-.0240
.685	-.2549	.2484	-.1719	.2605	.1356
.775	-.2193	.1554	.1892	.1232	-.2915
.900	.0457	.0265	-.0267	-.0871	-.2379

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

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(XEBV36)

SECTION 1 : INVERTICAL

DEPENDENT VARIABLE CP

Z/BV

.1580

.3170

.4590

.6020

.6970

.8390

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X/CV

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.0276

.0415

.0567

.185

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

ALPHA (S) =	11.935	BETA (3) =	4.259	MACH =	.89977	DEPENDENT VARIABLE CP	P =	1059.2	RNL =	3.5829
SECTION (I) VERTICAL	Z/BY	X/CY	Z/BY	X/CY	Z/BY	X/CY	Z/BY	X/CY	Z/BY	X/CY
	.020	.3536	.1475		.0528		.1339		.0643	
	.025	.1186	.6093		.6527		.2387		.2637	
	.050	-.0552	-.4743		-.6183		-.2402		.2338	
	.150	-.1492	-.3912		-.4834		-.2201		.2114	
	.200	-.3265	-.4250		-.0772		-.1630		.1416	
	.520	-.4904	-.0556		.1722		-.0434		.1939	
	.625	-.2810	.0956		.1851		-.0151		.2597	
	.775	-.2274	.0331		.1578		-.0893		.2578	
	.900	-.0620	-.0786		.0634		-.1041		.1925	
					-.0783				-.2349	

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(XEV36)

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TABULATED PRESSURE DATA - 041148 (AMES 11-073-1)

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AMES 11-073(041148) -140A/B/C/R ORB VERTICAL

ALPHA (31) = 4.041 BETA (2) = -3.867 MACH = .59620 Q = 593.73 P = 2386.0 RNL = 4.8840

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .2233 .0428 -.0437 -.0289 -.2085

.025 .2482 .2131 .3359 .3413 .2942

.050 .2145 .1655 .2910 .3146 .2607

.150 .0977 .0931 .2178 .2156 .1401

.250 -.0039 .0321 .2017 .1682 .0592

.520 -.1935 .1391 .2579 .1415 -.0341

.655 -.2505 .2378 -.1527 .2414 .2222 .1472 .2406

.775 -.2159 .1472 .1368 .1091 .0989 .0008 .2351

.900 -.0254 -.0647 -.0603 -.0639 -.0935 -.2545

ALPHA (31) = 4.040 BETA (3) = .186 MACH = .59620 Q = 593.73 P = 2386.0 RNL = 4.8840

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .4143 .3474 -.3767 .3607 .3035

.025 -.0474 -.2392 -.0139 .1155 .0572

.050 -.0351 -.0359 -.0529 .1181 .0859

.150 -.0377 -.0659 .0721 .0943 .0506

.300 -.1123 -.0791 .1042 .0900 .0141

.520 -.2534 -.0727 .2128 .1306 .0384

.685 -.2427 .1918 -.1495 .1890 .1316 .2437

.775 -.1353 .0350 .0878 .0536 .0612 .0215 .2475

.900 -.0781 -.1079 -.1029 -.1046 -.1130 -.2524

ALPHA (31) = 4.044 BETA (4) = 4.237 MACH = .59620 Q = 593.73 P = 2386.0 RNL = 4.8840

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BY .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .2659 .1311 .2251 .2213 .2268

.025 -.3212 -.5567 .1406 .2891 .5248

.050 -.2264 -.1513 .3367 .2609 .3708

.150 -.2422 -.3237 .2308 .1466 .1072

.300 -.2253 -.1930 .0529 .0028 .0312

.520 -.2376 .0114 .1232 .0804 .0237

.685 -.2239 .1371 -.1493 .1118 .1678

.775 -.2153 .0496 .1252 .1078 .1140 .1796

.900 -.1273 -.1650 -.1239 .1319 .0953 .1841

AMES 11-073(DA14B) -140A/B/C/R ORB VERTICAL

ALPHA = 4.049 BETA = 1.50 = 8.284 MACH = .59620 0 = 593.73 P = 2386.0 RNL = 4.6840

SECTION 1: VERTICAL

SECTION 2: VERTICAL

SECTION 3: VERTICAL

SECTION 4: VERTICAL

SECTION 5: VERTICAL

SECTION 6: VERTICAL

SECTION 7: VERTICAL

SECTION 8: VERTICAL

SECTION 9: VERTICAL

SECTION 10: VERTICAL

SECTION 11: VERTICAL

ALPHA = 7.972 BETA = 1.11 = -7.93+ MACH = .59565 0 = 594.55 P = 2385.8 RNL = 4.8889

SECTION 12: VERTICAL

SECTION 13: VERTICAL

SECTION 14: VERTICAL

SECTION 15: VERTICAL

SECTION 16: VERTICAL

SECTION 17: VERTICAL

SECTION 18: VERTICAL

SECTION 19: VERTICAL

SECTION 20: VERTICAL

SECTION 21: VERTICAL

ALPHA = 7.98+ BETA = 2.1 = -3.98+ MACH = .59566 0 = 594.55 P = 2385.8 RNL = 4.8889

SECTION 1: VERTICAL

SECTION 2: VERTICAL

SECTION 3: VERTICAL

SECTION 4: VERTICAL

SECTION 5: VERTICAL

SECTION 6: VERTICAL

SECTION 7: VERTICAL

SECTION 8: VERTICAL

SECTION 9: VERTICAL

SECTION 10: VERTICAL

SECTION 11: VERTICAL

SECTION 12: VERTICAL

SECTION 13: VERTICAL

SECTION 14: VERTICAL

SECTION 15: VERTICAL

SECTION 16: VERTICAL

SECTION 17: VERTICAL

SECTION 18: VERTICAL

SECTION 19: VERTICAL

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL
(XEBV37)

ALPHA (4) = 7.990

BETA (3) = .171

MACH = .59666

P = 594.55

RNL = 4.8889

SECTION 1 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.3878	.3007	.3191	.2920	.2352
.025	-.0453	-.2284	-.0110	.1042	.0570
.050	.0231	-.0464	.3457	.1091	.0746
.150	-.0507	-.0870	.0589	.0780	.0339
.300	-.1327	-.0929	.0917	.0709	-.0049
.520	-.2666	.0711	.1941	.0955	-.0683
.625	-.2460	.1979	.1776	.1082	-.2448
.775	-.1867	.0986	.0811	.0400	.0333
.900	-.0693	-.1149	-.1126	-.1178	-.1212
					-.2597

ALPHA (4) = 7.990

BETA (4) = 4.234

MACH = .59666

P = 594.55

RNL = 4.8889

SECTION 1 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.2667	.0969	.1719	.1667	.1753
.025	-.3470	-.6744	-.4031	-.2910	-.5012
.050	-.3093	-.4965	-.3613	-.2769	-.3556
.150	-.2368	-.3180	-.2554	-.1879	-.1154
.300	-.2510	-.2014	-.0523	-.0122	-.0435
.520	-.3237	.0059	.1148	.0551	-.592
.685	-.2180	.1322	.1398	.0789	.0827
.775	-.1948	.0452	.0239	.0077	-.0335
.900	-.1249	-.1708	-.1367	-.1377	-.1103
					-.2182

ALPHA (4) = 7.988

BETA (5) = 8.288

MACH = .59666

P = 594.55

RNL = 4.8889

SECTION 1 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-.1454	-.5475	-.3386	-.1652	-.1815
.025	-.6501	-.9442	-.6971	-.3044	
.050	-.6592	-.8677	-.7072	-.3438	-.2740
.150	-.7814	-.9618	-.6985	-.3410	-.2589
.300	-.3724	-.3555	-.6445	-.3301	-.2323
.520	-.3498	-.1345	-.0790	-.2711	-.2653
.685	-.2378	.0195	.1603	.2362	-.2232
.775	-.2439	.0269	.0512	.1064	-.2152
.900	-.1762	-.2293	-.0594	-.0669	-.1989
					-.2015

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

(XEBV37)

ALPHA (5) = 11.959 BETA (1) = -7.860 MACH = .59676 Q = 594.79 P = 2385.8 RNL = 4.8888

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-2158	-6791	-8579	-7645	-7679
.025	-2891	-3104	-3478	-3077	-1693
.050	-2423	-2833	-3452	-3209	.2161
.150	-1028	-1795	-2872	.2444	-1307
.350	.3264	.1145	.2527	.1835	.0347
.550	-1.395	.2103	.2676	.1113	-.1051
.695	-.2114	.3132	-.1577	.2421	.1916
.775	-.2407	.2339	.1792	.1292	.1007
.900	.0561	-.0103	-.0181	-.0495	-.1254

RNL = 4.8888

P = 2385.8

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

ALPHA (5) = 11.985 BETA (4) = 4.243 MACH = .59676 Q = 594.79 P = 2385.8 RN/L = 4.8888

SECTION 1 INVERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.2255	.0733		.1214		
	.025	-.3347	-.6775		-.4206		
	.050	-.3054	-.5251		-.3801		
	.150	-.2427	-.3060		-.2827		
	.300	-.2629	-.2153		-.0518		
	.520	-.3229	-.0255		-.1058		
	.685	-.2137	-.1242		-.1131		
	.775	-.1999	-.0409		.0157		
	.900	-.1197	-.1766		-.0015		

ALPHA (5) = 11.975 BETA (5) = 8.313 MACH = .59676 Q = 594.79 P = 2385.8 RN/L = 4.8888

SECTION 1 INVERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	-.1705	-.5951		-.4382		
	.025	-.6960	-.9766		-.7322		
	.050	-.7334	-.9226		-.7480		
	.150	-.4953	-.9578		-.7537		
	.300	-.4789	-.3585		-.7051		
	.520	-.4552	-.1474		-.0285		
	.685	-.3420	-.0304		.1177		
	.775	-.2984	-.0858		-.2103		
	.900	-.2191	-.2261		.0533		

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1XE8V31.

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

DEPENDENT VARIABLE CP

P = 2385.8

RN/L = 4.8888

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-07310A1481 - 140A/B/C/R ORB VERTICAL

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REFERENCE DATA

SREF = .592 CCW SQ.FT.
 LREF = +74.600 IN.
 BREF = 936.056 IN.
 SCALE = .0300

ALPHA (1) = -4.002 BETA (1) = -3.853 MACH = 1.3931 Q = 600.20 P = 441.83 RNL = 2.9112

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.7815	.5668	.6962	.5413	.4423		
	.6076	.5160	.7054	.8689	.8129		
	.6253	.5177	.7220	.8561	.7976		
	.4252	.4212	.7926	.8233	.7356		
	.2535	.2324	.6953	.7133	.6899		
	.2238	.9712	.9841	.7999	.4565		
	.2972	.1.2134	.1.1488	.9057	.7586	-.3119	
	.5443	.5685	.1.0106	.9222	.8684	.6839	-.4812
	.5078	.8397	.7621	.6936	.5060	.5347	
ALPHA (1) = -3.940 BETA (1) = .193 MACH = 1.3931 Q = 600.21 P = 441.83 RNL = 2.9112							
X/CV	.0300	.7300	.7035	.7778	.7358		
	.325	.3659	.1471	.1212	.7776	.7419	
	.450	.4604	.3457	.2217	.7750	.7322	
	.4294	.4294	.2775	.7066	.7709	.6949	
	.300	.3601	.2113	.6547	.7856	.6677	
	.320	.3258	.6235	.7849	.7253	.3813	
	.486	.4240	.1.1573	.1.1411	.7655	.6831	-.3067
	.576	.1.1503	.1.2561	.1.0459	.7991	.6274	-.4566
	.300	.6E53	.3+51	.7632	.6917	.4770	-.5173

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

PARAMETRIC DATA

RUDDER = 10.000 SPDBRK = 85.000
 BDFLAP = 16.300 L-ELVN = 10.000
 R-ELVN = 10.000 MACH = 1.400

IXE8V3B1 (13 AUG 75)

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(DA14B) - 140A/B/C/R ORB VERTICAL

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ALPHA (2) = .039 BETA (3) = 4.255 MACH = 1.3931 Q = 599.59 P = 441.36 RN/L = 2.9073

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6895 .5941 .5479 .0746 .7331 .6731

.025 -.0324 -.1352 .0496 .5602 .4933

.050 .0403 -.1378 .1067 .5810 .5334

.150 .1407 -.0217 .2083 .5931 .5563

.300 .1520 .0499 .3040 .5857 .5138

.520 -.0021 .4691 .5724 .4302 .2207

.695 -.4199 .9249 -.1485 .6150 .4562

.775 -.2355 .9095 .9348 .7818 .5547

.900 .7722 .7716 .7634 .6320 .1940 .5539

ALPHA (3) = 3.894 BETA (1) = -3.872 MACH = 1.3932 Q = 599.70 P = 441.36 RN/L = 2.9108

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6215 .5225 .4914 .3249 .3653 .3258 .2489

.3743 .3667 .3681 .3650 .7098 .6650

.4187 .3681 .2724 .6932 .6898 .6601

.450 .2467 .2724 .7739 .6941 .5706

.700 .2380 .1908 .8176 .6593 .3361

.620 .6943 .6200 .11243 .7921 .7286 .3192

.595 -.4080 1.1243 .1667 .7954 .5677 .5117

.75 .2142 .3742 .9219 .6683 .4166 .5405

.900 .8323 .7515 .6683 .5883

ALPHA (3) = 3.895 BETA (2) = .183 MACH = 1.3932 Q = 599.70 P = 441.36 RN/L = 2.9100

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .600 .5682 .6014 .5353 .0355 .5864 .4891

.125 .1622 .1586 -.0169 .6508 .6248

.150 .2235 .2251 -.0169 .6512 .6104

.175 .1725 .1702 .5455 .6600 .5781

.200 .1743 .1751 .5995 .6257 .5212

.225 .6268 .4369 .5713 .5415 .2046

.250 -.4122 1.0428 -.1555 .6541 .5599 .3737

.275 -.2283 .9277 .9305 .6407 .7016 .4290

.300 .7783 .7357 .6973 .6373 .3951 .5194

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TABULATED PRESSURE DATA - OA14B (AMES ::-073-1)

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AMES 11-073(OA14B) -140A/B/C/R Q95 VERTICAL

(XEBV3B)

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .5883 .5378 .4591 .6292 .5960

.325 -.1138 -.1578 -.1341 .5147 .4599

.350 -.0189 -.1451 -.0709 .5334 .5043

.150 .1401 -.0313 -.0737 .5341 .5225

.520 -.0724 .3295 .2017 .5303 .4790

.625 -.3818 .7910 -.1581 .6635 .5026

.775 -.2774 .8216 .8741 .7986 .6389

.900 .7098 .7178 .6841 .6228 .2504

ALPHA (4) = 7.922 BETA A (1) = -3.861 MACH = 1.3932

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .5975 .4907 .4224 .3054 .1734

.025 .2761 .2946 .2492 .6391 .5900

.050 .3940 .3107 .2763 .6300 .5977

.150 .2879 .2170 .5027 .6205 .5357

.300 .1562 .1269 .7167 .6203 .5057

.520 .0431 .4954 .7139 .5677 .2586

.585 -.4172 1 .1055 -.1714 .6915 .6470

.775 -.2595 .9406 .8818 .7375 .6589

.930 .8036 .7102 .6220 .5365 .3634

ALPHA (4) = 7.892 BETA A (2) = .182 MACH = 1.3932

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6849 .5250 .4463 .4794 .3707

.025 .1698 .0383 -.0764 .5836 .5565

.050 .3533 .2128 -.0726 .5916 .5427

.150 .2991 .1183 .157 .5794 .5020

.300 .1148 .0395 .6068 .5530 .4399

.520 -.0389 .3585 .4950 .4306 .1219

.685 -.4372 .9745 -.1609 .6248 .5050 .4601

.775 -.2561 .8489 .8463 .7734 .6821 .3695

.930 .7238 .6687 .6219 .5724 .3967 .5355

(XEBV3B)

P = 441.36

RNL = 2.9108

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6849 .5250 .4463 .4794 .3707

.025 .1698 .0383 -.0764 .5836 .5565

.050 .3533 .2128 -.0726 .5916 .5427

.150 .2991 .1183 .157 .5794 .5020

.300 .1148 .0395 .6068 .5530 .4399

.520 -.0389 .3585 .4950 .4306 .1219

.685 -.4372 .9745 -.1609 .6248 .5050 .4601

.775 -.2561 .8489 .8463 .7734 .6821 .3695

.930 .7238 .6687 .6219 .5724 .3967 .5355

(XEBV3B)

P = 441.12

RNL = 2.9102

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6849 .5250 .4463 .4794 .3707

.025 .1698 .0383 -.0764 .5836 .5565

.050 .3533 .2128 -.0726 .5916 .5427

.150 .2991 .1183 .157 .5794 .5020

.300 .1148 .0395 .6068 .5530 .4399

.520 -.0389 .3585 .4950 .4306 .1219

.685 -.4372 .9745 -.1609 .6248 .5050 .4601

.775 -.2561 .8489 .8463 .7734 .6821 .3695

.930 .7238 .6687 .6219 .5724 .3967 .5355

(XEBV3B)

P = 441.12

RNL = 2.9102

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

(K68V381)

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ALPHA (1) = 7.830 Eta (1) = 4.245 MACH = 1.3932 Q = 599.39 P = 441.12 RN/L = 2.9102

SECTION 1 INVERTICAL

X/CY 1.00 .5600 .5041 .3855 .5160 .5321
1.25 .0333 -.1520 -.2400 .4581 .4296
.50 .1494 -.1310 -.2858 .4612 .4388
.75 .2348 -.0030 .0026 .4687 .4520
.50 .0476 -.0560 .2732 .4347 .4454
.25 .1151 .1819 .4803 .2288 .0930
.6556 .8391 -.1608 .5661 .5462 .5480
.775 .3320 .7378 .8301 .6895 .2906
.50 .6396 .6547 .6307 .5709 .3625 .5598

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

ALPHA (2) = 11.870 Eta (1) = -3.851 MACH = 1.3941 Q = 600.12 P = 441.12 RN/L = 2.9072

SECTION 1 INVERTICAL

X/CY 1.00 .5600 .4595 .3520 .2249 .0909
1.25 .3159 .2547 .1918 .5697 .5140
.50 .1166 .2739 .2095 .5669 .5206
.75 .2605 .1534 .3452 .5622 .4784
.6492 .6335 .6556 .5494 .4362
.50 .1305 .4143 .6351 .4914 .1995
.15 .2233 .0790 -.1640 .6346 .4666 -.3732
.2697 .9339 .8543 .6879 .6018 .4898 -.3279 -.5459
.50 .7968 .6774 .5763

Z/BY .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

ALPHA (3) = 11.880 Eta (1) = 1.87 MACH = 1.3941 Q = 600.12 P = 441.12 RN/L = 2.9072

SECTION 1 INVERTICAL

X/CY 1.00 .5600 .5172 .4590 .6020 .6970 .8390 .9250

Z/BY .560 .5172 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CY 1.00 .690 .4797 .3759 .3965 .2684
.25 .524 .0130 -.1033 .5244 .4902
.50 .2553 .1788 -.1062 .5277 .4857
.75 .2611 .0875 .2400 .4876 .4332
.50 .0362 .0362 .5287 .4750 .3789
.15 .032 .2903 .4360 .3313 .0704
.25 .4672 .8557 -.1654 .6063 .4838
.50 .2898 .7757 .7801 .7084 .6443 .3590 .5494
.75 .5598 .5598 .6128 .5590 .5050 .3879 .5492

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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AMES 11-073(OAI4B) - 140A/B/C/R ORB VERTICAL

(XE8V38)

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	1.000	.6265	.4690	.3131	.2606	.2169	.1621
.025	.1204	.1544					
.050	.1649	.1440					
.150	.2244	.0298					
.300	.3466	.0783					
.520	.1452	.1062					
.665	.4248	.7895	.1667	.4136			
.775	.3563	.6555					
.900	.5749	.5749	.5914	.5566			

ALPHA (5) = 11.873 BETA (3) = 4.255 MACH = 1.3941 Q = 600.12 P = 441.12 RNL = 2.9072

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	1.000	.7656	.5141	.3257	.1432	.1624	.0290
.025	.1990	.1238					
.050	.0411	.2637					
.150	.2394	.1157					
.200	.0039	.0129					
.520	.1018	.2770					
.625	.4243	.1.0495	.1718	.5805			
.775	.2281	.1.0159	.8596	.5490			
.900	.8383	.6945	.5533	.4474			

ALPHA (6) = 15.866 BETA (2) = 1.85 MACH = 1.3929 Q = 599.99 P = 441.82 RNL = 2.9183

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

X/CV	1.000	.6293	.4953	.3270	.1425	.3230	.2099
.025	.0931	.0187					
.050	.2306	.1507					
.150	.2754	.0600					
.300	.0716	.0355					
.520	.1.187	.2380					
.665	.4550	.8938	.1690	.5750			
.775	.5220	.7563	.7617	.6595			
.900	.6560	.5360	.5150	.4538			

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TABULATED PRESSURE DATA - OAI148 (AMES 11-073-1)

PAGE 6807

AMES 11-073(OAI148) -140A/B/C/R ORB VERTICAL

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REFERENCE DATA

Z-F = 1500 SQ.FT. XNP = 1076.8300 IN. X0
 Z-F = 310 IN. YNP = .0000 IN. Y0
 BRF = 95E-.2580 IN. ZNP = 375.0000 IN. Z0
 SCALE = .0500

ALPHA (1) = -3.931 BETA (1) = -3.847 MACH = 1.2464 Q = 599.79 P = 551.57 RN/L = 3.0146

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP
Z-D / A/CV
1583 .3170 .4590 .6020 .6970 .8390 .9250

.002	.7621	.52*0	.6436	.4945	.4107
.025	.5924	.4587	.7399	.8187	.7555
.050	.5919	.4513	.7340	.8035	.7373
.075	.4817	.3549	.7590	.7609	.6679
.100	.3273	.3475	.8400	.7444	.6149
.125	.1739	.9153	.9202	.7363	.3804
.150	-2261	.1532	.1641	.8374	.7043
.175	.6357	.6200	.9405	.8549	-.4631
.200	.6258	.7547	.6538	.7950	-.6006
				.6138	.3987
					-.6335

ALPHA (1) = -3.979 BETA (2) = .190 MACH = 1.2464 Q = 599.79 P = 551.57 RN/L = 3.0146

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP
Z-D / A/CV
1583 .3170 .4590 .6020 .6970 .8390 .9250

.002	.9135	.6899	.7601	.7719	.7108
.025	.2345	.0351	.3679	.7260	.6737
.050	.4387	.2367	.5389	.7220	.6666
.075	.5192	.2155	.6680	.7119	.6332
.100	.2223	.1463	.8117	.7314	.6022
.125	.1595	.5771	.7997	.7052	.3376
.150	-3265	1.286	.1571	.7559	.6665
.175	.3552	.9589	.9371	.7644	-.4367
.200	.3501	.7571	.6978	.6163	-.5886
					-.6279

PARAMETRIC DATA

RUNNER = 10,000 SPDRK = 85,000
 BOLAP = 16,300 L-ELVN = 10,000
 R-ELVN = 10,000 MACH = 1.250

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TABULATED PRESSURE DATA - DATA 1 AMES 11-073-1

PAGE 680B

ALPHA = 1) = -3.999 BETA = 1 3) = 4.277 MACH = 1.2464 Q = 599.79 P = 551.57 RNL = 3.0146
 SECTION 1) VERTICAL
 Z, B, Y .1580 .3170 .4590 .6020 .6970 .8390 .9250

(XEV39)

X,CY
 .033 .7482 .6149 .6617 .7732 .6855
 .025 .0729 -.1591 .2705 .5313 .4424
 .350 .1046 -.1541 .2838 .5320 .4783
 .150 .2057 .0018 .3691 .5490 .4865
 .300 .1445 .9232 .4690 .5566 .4816
 .620 -.0218 .5568 .6126 .4831 .1766
 .155 -.4725 .7541 -.1544 .6041 .4464
 .115 -.3669 .6512 .9128 .6558 .3894
 .920 .7273 .7614 .6437 .5278 .5723
 ALPH_A (2) = .059 BETA (1) = -3.868 MACH = 1.2468 Q = 599.66 P = 551.10 RNL = 3.0101
 SECTION 2) VERTICAL
 Z, B, Y .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X,CY
 .033 .5977 .5504 .5783 .4094 .3091
 .025 .5085 .2885 .6169 .7496 .6869
 .150 .6263 .3837 .6268 .7363 .6708
 .300 .1125 .2336 .6824 .7023 .6064
 .600 .2614 .2729 .7780 .6900 .5620
 .100 .3300 .3557 .8546 .6748 .3185
 .155 .4277 .1055 -.1550 .8473 .7782
 .200 .1037 .2628 .8907 .8021 .6311
 .300 .5007 .7133 .6337 .5660 .5928
 ALPH_A (2) = .059 BETA (2) = .177 MACH = 1.2462 Q = 599.66 P = 551.10 RNL = 3.0101
 SECTION 3) VERTICAL
 Z, B, Y .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X,CY
 .033 .7555 .5235 .5359 .5751 .6161
 .025 .6553 .0247 .1268 .5680 .6225
 .150 .6153 .3173 .2046 .6637 .6116
 .300 .1264 .1524 .5999 .6559 .5757
 .600 .1365 .1339 .7510 .6718 .59426
 .100 .3319 .3446 .6697 .6124 .2545
 .155 .4279 .1747 .6911 .6609 .4534
 .200 .1035 .1636 .7512 .6886 .5915
 .300 .5001 .5001 .7174 .5696 .5800

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TABULATED PRESSURE DATA - OA148 : AMES 11-073-1)

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AMES 11-073-1(OA148) -140A/B/C/R ORB VERTICAL

$\alpha_{\text{PA}} + \beta_1 = 3.939 \quad \beta_{\text{TA}} + \beta_3 = 4.242 \quad \text{MACH} = 1.2469 \quad 0 = 599.77 \quad P = 551.10 \quad R_NL = 3.0098$

SECTION 1 : VERTICAL

$\alpha_{\text{PA}} + \beta_1 = 7.935 \quad \beta_{\text{TA}} + \beta_3 = -3.863 \quad \text{MACH} = 1.2467 \quad 0 = 599.84 \quad P = 551.34 \quad R_NL = 3.0131$

DEPENDENT VARIABLE CP

X/CY	500	5075	4935	4298	6277	5574
125	-0.5645	-0.2235	-0.332	.4456	.3625	
125	-0.1112	-0.2222	.5001	.4712	.4154	
150	-1.051	-0.595	.1233	.4870	.4405	
150	-0.29	-0.649	.2791	.4925	.4055	
150	-1.1432	-0.2693	.5142	.3366	.1183	
150	-1.4471	-0.8939	.5551	.2810	-.5434	
150	-22.4	.8351	.3965	.1548	.6155	
150	.6512	.6562	.7017	.5244	.0973	-.6355

$\alpha_{\text{PA}} + \beta_1 = 7.935 \quad \beta_{\text{TA}} + \beta_3 = -3.863 \quad \text{MACH} = 1.2467 \quad 0 = 599.84 \quad P = 551.34 \quad R_NL = 3.0131$

DEPENDENT VARIABLE CP

X/CY	500	5457	4524	3680	2456	1045
125	-1.7378	-1.2420	.2617	.5960	.5364	
125	-0.5651	-0.2691	.3521	.5868	.5286	
150	-0.716	-0.522	.3535	.5643	.4738	
150	-1.17	-0.655	.6550	.4400		
150	-1.155	-0.457	.7028	.5301	.842	
150	-1.8206	-1.0351	.6775	.5036	.897	
150	-1.327	-0.6235	.6333	.4393	.5939	
150	-1.53	.632	.5512	.523	.2765	-.6180

$\alpha_{\text{PA}} + \beta_1 = 7.935 \quad \beta_{\text{TA}} + \beta_3 = -1.182 \quad \text{MACH} = 1.2467 \quad 0 = 599.84 \quad P = 551.34 \quad R_NL = 3.0131$

DEPENDENT VARIABLE CP

X/CY	500	517	520	521	522	523
125	-0.69	-0.289	.2115	.4406	.2846	
125	-0.1299	-0.1299	.1299	.5255	.5116	
150	-1.155	-1.155	.1155	.5379	.4970	
150	-0.722	-0.722	.722	.5117	.5559	
150	-0.338	-0.338	.338	.5054	.5029	
150	-0.456	-0.456	.456	.4150	.4150	
150	-0.951	-0.951	.951	.3444	.5181	
150	-0.5375	-0.5375	.5375	.3123	.5909	
150	-0.6110	-0.6110	.6110	.2461	.6179	

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(0A-8) - 140A/B/C/R ORB VERTICAL

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ALPHA (4) = 7.878 BETA (1 3) = 4.243 MACH = 1.2467 0 = 599.64 P = 551.34 RN/L = 3.0131

SECTION 1) VERTICAL

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6368	.4628		.3436	.5494	.4906
.025	.0856	.2383		.2726	.4030	.3226
.050	.1348	.2172		.2080	.4297	.3748
.150	.1653	.0718		.0155	.4352	.4010
.300	.0218	.1177		.2568	.4132	.3755
.520	.1898	.2509		.4941	.2630	.0726
.665	.4615	.8459	-1652	.5397	.4688	.2539
.775	.2712	.7526	.7979	.6764	.5750	.5518
.900		.6095	.6044	.5648	.4943	.5780

ALPHA (5) = 11.869 BETA (1 1) = -3.849 MACH = 1.2475 0 = 600.06 P = 550.87 RN/L = 3.0127

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6668	.4283		.3052	.1552	.0081
.025	.2793	.1925		.1642	.5282	.4643
.050	.3524	.2126		.2135	.5214	.4648
.150	.2174	.1105		.5060	.5053	.4128
.300	.0437	.0071		.6151	.5025	.3828
.520	.0732	.4134		.6229	.4536	.1290
.665	.5266	.10425	-1614	.5967	.5407	.5105
.775	.2976	.8790	.7788	.6147	.3710	.5941
.900		.7212	.5036	.4914	.4054	.2324

ALPHA (5) = 11.810 BETA (1 2) = -187 MACH = 1.2475 0 = 600.06 P = 550.87 RN/L = 3.0127

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.6704	.4476		.3435	.3580	.2774
.025	.1615	.0630		.1852	.4785	.4491
.050	.3069	.1195		.1701	.4790	.4399
.150	.2279	.0154		.4005	.4811	.4004
.300	.0246	.0679		.5293	.4445	.3347
.520	.1455	.2780		.4133	.3208	.0030
.665	.5543	.9025	-1609	.5135	.4010	.2657
.775	.2713	.7902	.7564	.6582	.5494	.5440
.900		.6350	.5681	.5033	.4478	.5934

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

(XEBV39)

ALPHA (5) = 11.865

BETA (3) = 4.252

MACH = 1.2975

Q = 600.66

P = 550.87

R/V/L = 3.0127

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .5619 .4284 .2761 .4666 .4139

.025 .0653 -.2404 -.3521 .3761 .2970

.050 .1320 -.2248 -.3233 .3886 .3398

.150 .1651 -.0966 -.0550 .3829 .3506

.300 -.0342 -.1501 -.2496 .3390 .3183

.520 -.2132 .1707 .4231 .1915 .0169

.685 -.5092 .8199 .1719 .4728 .4361

.775 -.3451 .6929 .7439 .6264 .5389

.900 .5631 .5495 .5106 .4458 .2288

.5008

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TABULATED PRESSURE DATA - QA148 (AMES 11-073-1)

AMES 11-073(QA148) -140A/B/C/R ORB VERTICAL

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(XEBV40) (13 AUG 75)

REFERENCE DATA

SREF =	2690.0000	SQ.FT.	XMRP =	1076.6800	IN. X0
LREF =	.474.8000	IN.	YMRP =	.0000	IN. Y0
SREF =	936.0580	IN.	ZMRP =	.375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -3.999 BETA (1) = -3.842 MACH = 1.1017

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.6946	.5645		.5426		.4389	.3663
.025	.5344	.4093		.6953		.7425	.6731
.050	.5259	.4159		.6791		.7236	.6512
.150	.4046	.3623		.6843		.6737	.5734
.300	.2784	.3564		.7512		.6548	.5150
.520	.1682	.8221		.8455		.6494	.2671
.655	-.2128	1.0614	-1.899	.8210	.7618	.6197	-.5849
.775	-.6549	.6931	.8466	.7592	.6979	.4937	-.6661
.900		.7038	.6492	.5749	.5030	.2682	-.7033

ALPHA (1) = -3.997 BETA (2) = .94 MACH = 1.1017

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.7485	.6217		.7397		.7093	.6364
.025	.2540	-.0080		.4160		.6330	.5751
.050	.3731	.2114		.5182		.6268	.5695
.150	.2972	.1635		.6019		.6141	.5344
.300	.1354	.2493		.7324		.6155	.5023
.520	.0818	.6963		.7564		.6353	.2405
.685	-.1381	1.0500	-.1696	.7378	.7027	.6061	-.5678
.775	-.1028	.6914	.8732	.7576	.6857	.4668	-.6597
.900		.6785	.6455	.5795	.5017	.2596	-.6845

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	10.000	16.300		SPDBRK =	85.000		
.025	10.000	10.000		L-ELVN =	10.000		
.050				R-ELVN =			1.100
				MACH =			

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

PAGE 6814

ALPHA (1) = -3.996 BETA (3) = 4.277 MACH = 1.1017 0 = 601.11 P = 707.47 RN/L = 3.1883

SECTION (1) VERTICAL

Z / BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X / CV .000 .6712 .5407 .6700 .2355 .7147 .6371

.025 .0286 -.3316 .2355 .4416 .3240

.050 .0408 -.2369 .2445 .4461 .3896

.150 .1297 -.0550 .3253 .4745 .4148

.350 .0276 -.0178 .4655 .4771 .4160

.550 .1113 .5729 .3953 .4296 .0573

.750 -.2381 .7355 -.1880 .5140 .3978 -.5495

.950 -.1139 .8512 .8382 .6279 .5390 .3550 -.6436

.650 .6901 .6537 .5494 .4461 .2285 -.6798

ALPHA (2) = .015 BETA (1) = -3.867 MACH = 1.1001 0 = 600.08 P = 708.37 RN/L = 3.1860

SECTION (1) VERTICAL

Z / BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X / CV .6430 .4870 .4920 .3414 .2646

.325 .4538 .2901 .6143 .6793 .6102

.050 .4576 .3022 .6027 .6637 .5918

.150 .3229 .2224 .6242 .6167 .5178

.350 .1654 .2392 .7042 .6013 .4682

.550 .0577 .7908 .7583 .5892 .2052

.750 -.1941 .0363 -.1567 .6997 .5555 -.5617

.950 -.0715 .8570 .8059 .7143 .6495 .4439 -.6257

.650 .7585 .6865 .6078 .5301 .4561 .2263 -.6624

.350 .3000 .3600 .4500 .5000 .5500 .6000 -.6500

ALPHA (2) = .018 BETA (2) = .181 MACH = 1.1001 0 = 600.08 P = 708.37 RN/L = 3.1860

SECTION (1) VERTICAL

Z / BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X / CV .7058 .5561 .6574 .6373 .5610

.035 .1683 -.0681 .4314 .5875 .5284

.150 .3240 .1491 .4561 .5844 .5225

.150 .2379 .0708 .5527 .5705 .4864

.350 .0729 .0145 .6888 .5851 .4519

.550 -.0849 .6119 .6815 .5644 .1728

.650 -.1409 .1036 -.1499 .6704 .5233 .5528

.750 -.1256 .8680 .8395 .6265 .4240 .6218

.850 .6639 .6146 .5473 .4630 .2179 .6501

(XEBV40)

(XEBV40)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL
 $\alpha_{\text{PHA}} (2) = .012$ $\beta_{\text{ETA}} (3) = 4.250$ MACH = 1.100! 0 = 600.08 P = 708.37 RNL = 3.1860

SECTION 11:VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6262	.4797		.5506		.6514	.5728
.025	-.0617	-.3551		.1531		.4103	.3104
.050	-.0301	-.3085		.1668		.4223	.3758
.150	.0860	-.1194		.2487		.4396	.3845
.300	-.0177	-.1262		.3711		.4417	.3621
.520	.1970	.4666		.5501		.3527	.0031
.695	-.3546	.6511	-.1558	.5373	.4301	.2983	.5311
.775	-.1452	.7286	.8102	.6155	.4755	.2555	.6059
.900		.6158	.6104	.5586	.4100	.1644	.6303

ALPHA (3) = 3.919 $\beta_{\text{ETA}} (1) = -3.865$ MACH = 1.1005 0 = 600.31 P = 708.14 RNL = 3.1848

SECTION 11:VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6073	.4344		.4321		.2430	.1644
.025	.3498	.2141		.5092		.6106	.5409
.050	.3763	.2297		.5096		.5962	.5272
.150	.2581	.1361		.5533		.5585	.4604
.320	.1068	.0529		.6461		.5440	.4119
.520	-.0505	.7001		.7235		.5256	.1304
.695	-.2430	1.0146	-.1473	.6589	.6293	.4863	.5457
.775	-.0981	.8371	.7630	.6664	.5988	.3927	.6012
.900		.6622	.5692	.4824	.4102	.1923	.6326

ALPHA (3) = 3.917 $\beta_{\text{ETA}} (2) = -1.178$ MACH = 1.1005 0 = 600.31 P = 708.14 RNL = 3.1848

SECTION 11:VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6777	.4996		.5430		.5543	.4939
.025	-.1417	-.1026		.1748		.5359	.4792
.050	.2904	-.0777		.3463		.5331	.4714
.150	.2015	.0151		.4892		.5218	.4321
.320	.0222	-.0513		.6413		.5397	.3950
.520	-.1319	.5027		.5862		.4830	.1004
.695	-.3566	1.0115	-.1421	.5865	.5430	.4348	.5148
.775	-.1142	.8315	.8048	.6606	.5638	.3527	.5641
.900		.6343	.5766	.5092	.4226	.1748	.5906

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

ALPHA = 3) = 3.924 BETA (3) = 4.244 MACH = 1.1005 Q = 600.31 P = 708.14 RNL = 3.1848
 SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP (XEBV10)

Z/BV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.5924	.4267	.4031	.5798	.5067	
	.025	-.1034	-.3722	.0212	.3707	.2892	
	.050	-.0448	.3362	.0273	.3879	.3420	
	.150	.0486	-.1703	.1173	.3983	.3446	
	.300	-.0617	-.1698	.2778	.4026	.3157	
	.520	-.2554	.3458	.5319	.2944	-.0398	
	.655	-.4135	-.5924	.1495	.4886	.2301	-.5310
	.775	-.2246	.7447	.7477	.603	.1573	-.5815
	.900	.5939	.5595	.5184	.4321	.0964	-.6159

ALPHA = 4) = 7.901 BETA (1) = -3.860 MACH = 1.1015 Q = 600.67 P = 707.22 RNL = 3.1834
 SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP (XEBV10)

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CF	.000	.6126	.3806	.3616	.1494	.0488	
	.025	.3358	.1544	.3891	.5350	.4712	
	.050	.3511	.1731	.4077	.5298	.4611	
	.150	.2139	.0689	.4833	.4991	.4046	
	.300	-.2333	-.0269	.5858	.4906	.3662	
	.520	-.1210	.5280	.6640	.4578	.0731	
	.655	-.8149	.9329	-.1414	.5747	.4279	-.5351
	.775	-.1507	.8139	.7182	.6047	.3518	-.5745
	.900	.6761	.5314	.4372	.3578	.1638	-.6015

ALPHA = 4) = 7.905 BETA (2) = .181 MACH = 1.1015 Q = 600.67 P = 707.22 RNL = 3.1834
 SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP (XEBV10)

Z/BV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CF	.000	.6458	.4310	.3665	.4423	.3789	
	.025	.1337	-.1399	-.0560	.4812	.4256	
	.050	.2668	.7567	.1685	.4737	.4143	
	.150	.1556	-.5414	.4239	.4637	.3711	
	.300	-.1397	-.2225	.5681	.4652	.3376	
	.520	-.933	.3629	.4626	.3811	.0110	
	.655	-.5129	.9494	-.1310	.4862	.3345	-.5211
	.775	-.2168	.7662	.7554	.6004	.2771	-.5654
	.900	.5373	.5321	.4663	.3731	.1236	-.5952

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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$\alpha = 5.46^\circ \rightarrow \beta = 7.93^\circ \quad \text{BETA} (3) = 4.239 \quad \text{MACH} = 1.1015 \quad Q = 600.67 \quad P = 707.22 \quad RNL = 3.1834$

SECTION 1 VERTICAL

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6018 .3765 .2753 .5064 .4412

.6225 -.0336 -.3806 -.2150 .3189 .2594

.050 .0255 -.3314 -.1638 .3421 .2991

.150 .0595 -.1936 -.0651 .3532 .3062

.150 -.1352 -.2281 .2479 .3593 .2040

.150 -.2239 .2684 .5167 .2449 .0286

.6225 -.4877 .6569 -.1359 .5297 .4393 .2060 .4893

.775 -.2686 .7302 .6780 .5507 .4920 .1026 .5354

.350 .5621 .5001 .4322 .3789 .1051 .5741

$\alpha = 5.46^\circ \rightarrow \beta = 11.306 \quad \text{BETA} (1) = -3.844 \quad \text{MACH} = 1.0995 \quad Q = 600.08 \quad P = 709.07 \quad RNL = 3.1837$

SECTION 1 VERTICAL

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6336 .3638 .2875 .0421 .0919

.6225 .1696 .0250 .2974 .4781 .4091

.050 .2752 .1164 .3458 .4710 .4082

.150 .1372 .0108 .4445 .4478 .3524

.150 -.0500 -.0925 .5602 .4445 .3151

.520 -.1747 .4154 .5659 .3973 .0139

.520 -.5413 .9875 -.1469 .5525 .3718 .5815

.775 -.2343 .8143 .7172 .5532 .4921 .3070 .6226

.350 .615 .5212 .4129 .3205 .1310 .6495

$\alpha = 5.46^\circ \rightarrow \beta = 11.308 \quad \text{BETA} (2) = .168 \quad \text{MACH} = 1.0995 \quad Q = 600.08 \quad P = 709.07 \quad RNL = 3.1837$

SECTION 1 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6303 .3929 .2920 .3625 .3149

.025 .0392 -.1824 .-2642 .4330 .3802

.150 .2251 .0214 -.1603 .4278 .3682

.150 -.1241 -.0821 .3691 .4257 .3302

.150 -.0704 -.1629 .5011 .3969 .2850

.150 -.2332 .2579 .3683 .3015 .0667

.150 -.6037 .9178 -.1313 .4264 .3479

.150 -.3613 .7450 .7973 .5693 .2419 .6166

.150 .5710 .4904 .4283 .3498 .0919 .6469

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

SL. #	ALPHA	BETA	MACH	Q	P	RWL	(XEBW40)
SL. #	ALPHA	BETA	MACH	Q	P	RWL	3.1837
257	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.200	.6361	.3542	.2028	.4378	.3285		
.265	.0021	-.3989	-.3787	.2798	.2383		
.050	-.1C36	-.3+27	-.3206	.2890	.2463		
.150	.0752	-.2073	-.1395	.3086	.2352		
.353	-.1539	-.2628	.2843	.3010	.2366		
.520	-.3429	.2027	.4357	.1777	.1079		
.685	-.5627	.7176	-.1447	.1563	.5416		
.775	-.2254	.6524	.6536	.4397	.1034	-.5531	
.935		5.37	.4772	.3258	.1339	-.5886	

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TARNATED PRESSURE DATA - 00148 (AMES 11-073-1)

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AMES 11-07310A1481 -140A/B/C/R DBB VERTICAL

(XEBV11) MACH = 4.253 P = .89853 Q = 598.47 R = 1059.0 S/N/L = 3.5741

SECTION 11 VERTICAL

CP

2-B1 : 1590 .3170 .4590 .6020 .6970 .8390 .9250

A_FVA : 31 = 2.947 BETA 1 1) = -3.868 MACH = .89830 0 = 598.51 P = 1059.5 S/N/L = 3.5778

DEPENDENT VARIABLE CP

2-B1 : 1550 .3170 .4590 .6020 .6970 .8390 .9250

A_FVA : 31 = 4.018 BETA 1 2) = -1.84 MACH = .89830 0 = 598.51 P = 1059.5 S/N/L = 3.5778

DEPENDENT VARIABLE CP

2-B1 : 1580 .3170 .4590 .6020 .6970 .8390 .9250

A_FVA : 31 = 4.018 BETA 1 3) = 4.253 MACH = .89853 Q = 598.47 R = 1059.0 S/N/L = 3.5741

(XEBV11)

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TRANSLATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-07310A148) - 140A/B/C/R ORB VERTICAL
 $\alpha_{crit} = 4.018$ $\beta_{crit} = 4.245$ MACH = .89930 0 = 599.51 P = 1059.5 RNL = 3.5778

SECTION 1: INVERTICAL

Z BV .1580 3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

α	β	α_{crit}	β_{crit}	MACH	P	RNL
4.018	4.245	4.018	4.245	.89930	599.51	3.5778
4.018	4.245	3.732	2.358	.4221	4612	3438
4.018	4.245	2.968	7349	.0077	.0969	
4.018	4.245	2.013	6670	.0190	.2317	1653
4.018	4.245	1.954	3533	.0824	.2340	1968
4.018	4.245	3.267	0.792	.2078	.2189	1625
4.018	4.245	2.656	4647	.4006	.1572	1591
4.018	4.245	5619	1933	.2969	.1002	3598
4.018	4.245	2.622	5965	.4776	.0720	3920
4.018	4.245	2.613	3845	.3570	.2329	.0035
4.018	4.245	2.613	4234		.4018	

 $\alpha_{crit} = 4.018$ $\beta_{crit} = 4.245$ MACH = .89930 P = 599.51 RNL = 3.5778

SECTION 1: INVERTICAL

Z BV .1580 3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

α	β	α_{crit}	β_{crit}	MACH	P	RNL
4.018	4.245	3.732	1668	.1073	.0473	.0050
4.018	4.245	3.13	1500	.4234	.4632	.3701
4.018	4.245	1.957	1510	.4665	.4451	.3535
4.018	4.245	3.730	1551	.4552	.3967	.2786
4.018	4.245	3.0138	1339	.5597	.3678	.2162
4.018	4.245	3.0497	6100	.5219	.3431	.0252
4.018	4.245	3.072	8754	.4950	.3064	.3652
4.018	4.245	3.2375	7130	.6087	.1920	.3975
4.018	4.245	3.5139	3950	.2940	.2067	.4032
4.018	4.245	3.5139	4032		.0045	

 $\alpha_{crit} = 4.018$ $\beta_{crit} = 4.245$ MACH = .89930 P = 599.51 RNL = 3.5778

SECTION 1: INVERTICAL

Z BV .1580 3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

α	β	α_{crit}	β_{crit}	MACH	P	RNL
4.018	4.245	3.732	2933	.4468	.3952	.2995
4.018	4.245	3.1172	6375	.2276	.3559	.2862
4.018	4.245	0.624	0.23	.2816	.3521	.2742
4.018	4.245	0.64	0.78	.3526	.3291	.2292
4.018	4.245	1.517	0.74	.4759	.3395	.1948
4.018	4.245	1.519	4765	.4669	.3074	.0541
4.018	4.245	2.532	1930	.4297	.3864	.2650
4.018	4.245	2.532	5139	.4950	.3926	.1639
4.018	4.245	2.532	3756	.2677	.2018	.0091
4.018	4.245	2.532	4032		.3921	

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TABULATED PRESSURE DATA - DATA 14 (AMES 11-073-1)

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AMES 11-07310A1481 - 140A/B/C/R ORB VERTICAL

(XE941)

A₁ = P_A / (1 + 3) = 7.677 BETA₁ = 31° = 4.247 MACH = .89927 0 = 599.06 P = 1059.3 R_{M/L} = 3.5769

SECTION 1 (1) VERTICAL DEPENDENT VARIABLE CP

Z/B _V	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/C _V							
.000	.3362	.1773		.3613		.3997	.2815
.025	-.2845	-.7239		-.0239		.1935	.0978
.050	-.2039	-.6576		-.0104		.2046	.1276
.150	-.2028	-.3708		.0528		.1998	.529
.250	-.3052	-.1246		.1634		.1681	.112
.420	-.2765	-.4514		.4094		.0956	.895
.695	-.2318	-.8223	-.1918	.3963	.2949	.0639	.3614
.775	-.2757	-.6232	.5769	.4456	.2905	.0352	.3914
.970	-.4334	.3636	.3253	.3253	.2157	-.0251	.4059

A₂ = P_A / (5) = 11.893 BETA₂ = 11° = -3.850 MACH = .89863 0 = 598.63 P = 1059.0 R_{M/L} = 3.5769

SECTION 1 (1) VERTICAL DEPENDENT VARIABLE CP

Z/B _V	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/C _V							
.000	.7542	.1565		.0336		-.0628	-.1093
.025	-.0268	.73		.4382		.4128	.3093
.050	-.5775	.0210		.4196		.4049	.3040
.150	-.0264	.0365		.4201		.3507	.2330
.250	-.1063	.5935		.4785		.3284	.1754
.620	-.1532	.5945		.5152		.2955	.0557
.785	-.2353	.6791	-.2030	.4759	.4040	.2500	.3098
.775	-.3270	.7153	.5824	.4445	.3706	.1445	.4016
.300	-.5277	.3679	.2578	.2578	.1730	-.0375	.3879

A₃ = P_A / (5) = 11.848 BETA₃ = 21° = 191° MACH = .89863 0 = 598.63 P = 1059.0 R_{M/L} = 3.5769

SECTION 1 (1) VERTICAL DEPENDENT VARIABLE CP

Z/B _V	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/C _V							
.000	.3014	.2563		.3956		.3396	.2479
.025	-.0504	-.2804		.1744		.3148	.2391
.050	.0213	-.1289		.2477		.3110	.2370
.150	-.0110	-.1055		.3259		.2952	.2004
.250	-.1714	-.0552		.4328		.3082	.1654
.620	-.2037	-.4472	-.2060	.4619	.3900	.2478	.0933
.785	-.2115	-.5513	.4417	.3729	.1695	-.4052	.3902
.775	-.3035	-.3357	.2517	.2517	-.0110	-.3353	

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REGULATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(DA14B) -14CA/B/C/R DR8 VERTICAL

(XEBV41)

(XEBV41)

(XEBV41)

AMES 11-073(DA14B) -14CA/B/C/R DR8 VERTICAL

DEPENDENT VARIABLE CP

Z, B.

.1580

.3170

.4590

.6020

.6970

.8390

.9250

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

REFERENCE DATA

XREF	=	2690.0000 SO.FT.	XNRP	=	1076.6800 IN. X0
LREF	=	.471.8000 IN.	YNRP	=	.0000 IN. Y0
BREF	=	.336.0680 IN.	ZNRP	=	.375.0000 IN. Z0
SCALE	=	.0300			

$$\text{ALPHA} (1) = -4.049 \quad \text{BETA} (1) = -7.852 \quad \text{MACH} = .59622 \quad Q = 593.85 \quad P = 2386.3 \quad RNL = 4.8696$$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/8V	.1580	.3170	.4590	.5220	.6970	.8390	.9250
X/CV	.000	.0015	.0037	.0063	.0163	.02713	.2963
	.025	.0526	.0563	.0528	.06061	.5479	.4432
	.050	.0461	.04528	.0476	.05980	.5413	.4345
	.150	.3239	.2476	.2943	.5429	.4692	.3403
	.350	.2081	.2943	.5904	.5427	.4190	.2444
	.550	.0219	.8336	.2188	.6089	.3940	.0086
	.650	.2435	.6649	.5806	.5876	.3657	.3471
	.775	.2951	.4248	.3310	.5037	.2316	.3655
	.950				.2748	.0814	.3707

$$\text{ALPHA} (1) = -3.971 \quad \text{BETA} (2) = -3.842 \quad \text{MACH} = .59622 \quad Q = 593.85 \quad P = 2386.3 \quad RNL = 4.8696$$

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/8V	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.3646	.2172		.0596	.1188	.0287
	.025	.3641	.3362		.5494	.5239	.4411
	.050	.3271	.3105		.5092	.4990	.4151
	.150	.2170	.2364		.4666	.4278	.3150
	.350	.1153	.2134		.4981	.4001	.2052
	.550	.0813	.5665		.6074	.4096	.0218
	.685	.2502	.6295		.5932	.3927	.3462
	.775	.2879	.6321		.5694	.4425	.2408
	.950		.2843		.3123	.2596	.0724

(XEBW42) (13 AUG 75)

PARAMETRIC DATA

RUDDER =	10.000	SPDBRK =	85.000
BDFLAP =	16.300	L-ELVN =	10.000
R-ELVN =	10.000	MACH =	.600

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

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ALPHA (1) = -3.889 BETA (3) = .191 MACH = .59622 Q = 593.85 P = 2386.3 RNL = 4.8696
 SECTION 11 VERTICAL
 Z-BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

.000 .5162 .4928 .5419 .4905 .4111
 .025 .0344 -.1366 .2527 .3608 .2907
 .050 .1425 .0879 .3091 .3670 .2921
 .150 .1568 .0779 .3563 .3433 .2586
 .250 .1107 .1107 .4564 .3551 .2279
 .520 -.1162 .4973 .5478 .4162 .0412
 .885 -.2209 .8272 -.2169 .5000 .4130
 .975 -.2763 .6289 .5736 .4351 .3160
 .960 .3421 .2837 .2432 .1916 .0636 -.3419

ALPHA (1) = -3.983 BETA (4) = 4.273 MACH = .59622 Q = 593.85 P = 2386.3 RNL = 4.8696

SECTION 11 VERTICAL

Z-BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

.250 .2765 .2938 .4803 .4607 .3752
 .265 -.2437 -.4403 -.0247 .0605 -.1479
 .250 -.1862 .3301 .0053 .0872 -.0013
 .150 -.1378 .1594 .1381 .1518 .1661
 .300 -.1000 .0052 .2995 .2960 .2160
 .520 -.2055 .4357 .4543 .3400 -.0143
 .895 -.2747 .5905 -.2167 .4465 .4325
 .75 -.2820 .6204 .5373 .4179 .3724
 .900 .3078 .2621 .2171 .1431 .0747 -.3596

ALPHA (1) = -3.993 BETA (5) = 8.343 MACH = .59622 Q = 593.85 P = 2386.3 RNL = 4.8696

SECTION 11 VERTICAL

Z-BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV
 .000 -.0190 -.3109 .0406 .2347 .1651
 .025 -.5010 -.7829 -.3130 .0645 .0167
 .050 -.4829 -.6613 -.3034 .0778 .0313
 .150 -.6042 .6190 -.2562 .0641 -.0162
 .300 -.2678 -.2512 -.2349 .0037 -.0060
 .675 -.2726 .2206 .0423 .2048 -.2503
 .745 -.3048 .2747 -.2200 -.0006 .2534
 .745 -.3056 .2667 .5527 .1937 -.1238 -.3784
 .745 .2639 .2375 .3195 .0555 .2326 -.4165

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TABULATED PRESSURE DATA - 0414B (AMES 11-073-1)

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AMES 11-07310A1480 - 140A/B/C/R ORB VERTICAL
(XE8V42)

ALPHA : 2) = .111 BETA (4) = 4.251 MACH = .59612 Q = 593.61 P = 2386.1 RN/L = 4.8734

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.3132	.2134	.4157	.3392	.3009
.025	-.3024	-.4848	-.0586	.0530	-.1623
.050	-.2501	-.3974	-.0177	.0617	-.0333
.150	-.1943	-.2293	.0847	.0714	.1361
.350	-.1480	-.0359	.2398	.2525	.1710
.520	-.2252	.4136	.4292	.3022	-.0559
.635	-.2839	.5917	-.2067	.4154	.3639
.775	-.2839	.5366	.5027	.3987	.2050
.900	.2938	.2259	.2259	.1967	.0951

ALPHA : 2) = .040 BETA (5) = 8.310 MACH = .59612 Q = 593.61 P = 2386.1 RN/L = 4.8734

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-.0724	-.4139	-.0398	.1619	.1056
.025	-.5548	-.8522	-.3139	.0230	.0216
.050	-.5532	-.7498	-.3406	.0355	.0430
.150	-.6695	-.7400	-.1057	.0114	.0013
.350	-.2251	-.2639	-.3201	-.0540	-.0619
.520	-.2999	.2359	.0641	.2481	.2857
.635	-.3225	.3564	-.2132	-.0056	-.2347
.775	-.3151	.3463	-.5052	.2204	-.1509
.900	.863	.2569	.3113	.0914	-.2530

ALPHA : 3) = .4.041 BETA (1) = -7.899 MACH = .59612 Q = 593.79 P = 2386.0 RN/L = 4.8833

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-.0897	-.3978	-.6485	-.3637	-.3336
.025	.4272	.4010	.5083	.4507	.3503
.050	.3733	.3598	.5043	.4528	.3562
.150	.2394	.2713	.4665	.3949	.2850
.350	.1379	.2287	.4727	.3594	.2138
.520	.0539	.1595	.5237	.3316	.0283
.635	-.2641	.7797	-.1980	.4949	.4424
.775	-.7122	.6157	.5167	.3147	.2403
.900	.3939	.2623	.2127	.1638	.2084

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL.

A: R-F (3) = 3.985 BETA (5) = 8.292 MACH = .59674 Q = 594.79 P = 2386.0 RN/L = 4.8833

SECTION 1: INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV -.098 -.1257 -.4901 -.1020 -.0915 -.0163

.025 -.5940 -.9420 -.3506 -.0083 -.0054

.050 -.6182 -.8217 -.3261 -.0135 .0106

.152 -.7356 -.8489 -.3074 -.0449 -.0260

.270 -.3460 -.2654 -.3176 -.0932 -.0908

.570 -.3285 -.2699 -.0533 -.2515 -.2850

.635 -.3190 -.4049 -.2088 -.1687 -.2869

.678 -.3040 -.3763 -.3892 -.1925 -.2982

.699 -.2016 .2005 .2408 .0297 .2334

.270A (.+) = 7.905 BETA (1) = -7.888 MACH = .59644 Q = 594.20 P = 2386.1 RN/L = 4.8802

SECTION 1: INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV -.1302 -.4805 -.7129 -.4500 -.4367 -.4054

.065 -.3776 -.3636 -.4628 -.3982 -.2863

.050 -.3353 -.3768 -.4528 -.4089 .3101

.212 -.2515 -.3518 -.3581 .2170

.1201 -.2233 -.4403 -.3215 .1709

.316 -.0783 -.5474 -.4621 .2845 -.0025

.522 -.2564 -.7603 -.1945 -.2610 -.2502

.685 -.7531 .6159 .4814 .3907 .3442 .1604

.775 -.3944 .2499 .1971 .1581 .0479

.930 -.3944 .2499 .1971 .1581 .0479

.271A (.+) = 7.915 BETA (2) = -3.855 MACH = .59644 Q = 594.20 P = 2386.1 RN/L = 4.8802

SECTION 1: INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV -.2536 .0539 -.1245 -.1245 -.1078 -.1870

.225 -.2095 .2152 .4234 .3745 .2876

.150 -.1838 .1991 .3925 .3611 .2713

.150 .0914 .1362 .3544 .3006 .1927

.320 .0119 .1286 .3970 .2779 .1307

.720 -.11442 .5165 .4690 .2691 .0523

.485 -.2715 .7525 .1841 .3835 .2452 .2991

.715 -.2827 .5886 .4700 .3733 .3197 .1395

.715 -.3568 .2226 .1581 .1113 .0040 .2857

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 1400A/B/C/R ORB VERTICAL

PAGE 6932

ALPHA (5) = 11.910 BETA (1) = -7.853 MACH = .59658 Q = 594.43 P = 2385.8 RNL = 4.8825

(XE8V42)

SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP

(XE8V42)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

(XCV)

.000	-.1322	-.5774	-.7717	-.5146	-.4746
.025	.3025	.3390	.4084	.3778	.2259
.050	.2487	.3089	.4294	.3651	.2613
.100	.1221	.2250	.4129	.3265	.2061
.150	.0476	.2096	.4133	.2894	.1469
.200	-.1068	.5532	.4486	.2475	.0277
.250	-.2519	.7653	-.1898	.3502	.2196
.275	-.2560	.6252	.4647	.3587	.2100
.300	-.4027	.2335	.1704	.1283	.0289

(XCV)

ALPHA (5) = 11.930 BETA (2) = -3.836 MACH = .59658 Q = 594.43 P = 2385.8 RNL = 4.8825

(XE8V42)

SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP

(XCV)

DATE 14 FEB 76

TABULATED PRESSURE DATA - DATA 1 ATES 11-073-1

PAGE 6835

ATES 11-073(DAT148) - 140A/B/C/R OBS VERTICAL

(XE8943)

RN/L = 3.6697

SECTION 1 VERTICAL

DEPENDENT VARIABLE CP

P = 1060.9

RN/L = 3.6697

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

P = 1060.9

RN/L = 3.6697

DEPEN

DENT

VARIABLE

CP

P = 1060.9

RN/L = 3.6697

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VARIABLE

CP

P = 1060.9

RN/L = 3.6697

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RN/L = 3.6697

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VARIABLE

CP

P = 1060.9

RN/L = 3.6697

DEPEN

DENT

VARIABLE

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140M/B/C/R OAB VERTICAL

PAGE 6836

ALPHA (2) = -.021 BETA (3) = .4247 MACH = .89677 Q = .597.91 P = .1052.1 RNL = 3.6486

SECTION 1 VERTICAL

DEPENDENT VARIABLE CP

Z/EV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.4191	.2705		.2550		.2237	.1491
.050	-.2831	-.7345		-.6487		-.2326	-.1813
.100	-.1913	-.6425		-.6378		-.2302	-.1626
.150	-.1370	-.3563		-.5626		-.2304	-.1515
.200	-.2975	-.3817		-.3051		-.2387	-.1661
.250	-.1655	-.0012		.2879		-.1657	-.2998
.300	-.3532	-.1762		-.2005		-.1438	-.3190
.350	-.2624	-.1259		-.1445		-.2180	-.3320
.400	-.0134	-.0559		-.0014		-.0257	-.3592

BETA (1) = .931 BETA (1) = -3.870 MACH = .89677 Q = .597.91 P = .1052.1 RNL = 3.6354

DEPENDENT VARIABLE CP

Z/EV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.7616	.2296		.2246		.3360	.2798
.050	-.0324	-.0324		.2937		.3509	.2994
.100	-.0341	-.0341		.5592		.3295	.2774
.150	-.0214	-.0214		.2335		.2602	.1847
.200	-.0259	-.0259		.2390		.2186	.1108
.250	-.0232	-.0232		.2614		.2466	.0570
.300	-.1930	-.1930		.4243		.2440	.2743
.350	-.2302	-.2302		.1936		.1621	.0118
.400	-.0597	-.0597		.0274		-.0304	-.2995

BETA (1) = .931 BETA (1) = -.185 MACH = .89677 Q = .597.91 P = .1052.1 RNL = 3.6254

DEPENDENT VARIABLE CP

Z/EV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.4755	.2757		.4269		.4455	.3374
.050	-.0162	-.3969		-.2541		-.0873	-.1708
.100	-.0391	-.1775		-.0027		.0584	.0203
.150	-.0318	-.1875		.0454		.1018	.0714
.200	-.0185	-.0185		.1174		.1345	.0598
.250	-.0352	-.0352		.2861		.2186	.0283
.300	-.1875	-.1875		.2747		.1943	.3207
.350	-.1697	-.1697		.1522		.1266	.0223
.400	-.0172	-.0172		-.2143		-.0600	-.2157

DATE 14 FEB 75

TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

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(XEBW3)

(XEBW3)

(XEBW3)

(XEBW3)

(XEBW3)

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

(XEBW3)

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .3636 .2125 .7578 .4417 .4917 .5879 .6656

.000 -.3074 -.7578 -.4417 -.4917 -.5879 -.6656

.025 -.2118 -.6974 -.4295 -.4917 -.5879 -.6656

.050 -.2073 -.4295 -.3383 -.4917 -.5879 -.6656

.150 -.3563 -.4295 -.3383 -.4917 -.5879 -.6656

.300 -.5174 .0183 -.1959 -.1955 -.2489 -.2446

.620 -.3630 -.1959 -.1134 -.1240 -.1835 -.2762

.895 -.2769 -.0691 -.0344 -.0408 -.0156 -.1680

.775 -.0540 -.0344 -.0408 -.0408 -.0156 -.1680

.950 -.0540 -.0344 -.0408 -.0408 -.0156 -.1680

(XEBW3)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6838

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

INDEX#3)

$\alpha_{SP4} (+) = 6.004 \quad \beta_{CAL} (-3) = 4.244 \quad MACH = .89613 \quad 0 = 597.48 \quad P = 1062.9 \quad T_{BL} = 3.5207$

SECTION: (1) VERTICAL

DEPENDENT VARIABLE CP

Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	-3194	-1471	.0911	.0624	-.0179
-1.225	-1.2684	-1.7689	-.6641	-.2608	-.2162
-1.260	-1.2932	-1.7146	-.6425	-.2672	-.1983
-1.295	-1.3155	-1.6298	-.5830	-.2648	-.1815
-1.330	-1.3347	-1.5284	-.2431	-.2857	-.2207
-1.365	-1.3570	-1.4376	-.1982	-.2179	-.2998
-1.400	-1.3722	-1.3764	-.1006	-.1739	-.2880
-1.435	-1.3910	-1.3212	-.0479	-.0467	-.3026
-1.470	-1.4047	-1.2677	-.5523	-.1147	-.3083
-1.505	-1.4147	-1.2177	0 = -3.863	MACH = .89753	0 = 598.58
-1.540	-1.4213	-1.1775	.6020	.5970	.3390 .9250

SECTION: (2) VERTICAL

DEPENDENT VARIABLE CP

X/CV	-338	.039	.1747	.1078
-1.262	-1.2621	.2065	.2925	.2344
-1.297	-1.2867	.1961	.2694	-.2084
-1.332	-1.3182	.1582	.2050	.1191
-1.367	-1.3523	.1253	.1661	.0472
-1.402	-1.3865	.0933	.1957	.0028
-1.437	-1.4035	.0635	.2507	.1424
-1.472	-1.4145	.0325	.1107	.5145
-1.507	-1.4245	.0022	.0732	.3230
-1.542	-1.4322	-.0732	-.2207	-.3296
-1.577	-1.4392	0 = -3.863	MACH = .89753	0 = 598.58
-1.612	-1.4452	.6020	.5970	.3390 .9250

DEPENDENT VARIABLE CP

X/CV	-339	.039	.1747	.1078
-1.262	-1.2621	.2065	.2925	.2344
-1.297	-1.2867	.1961	.2694	-.2084
-1.332	-1.3182	.1582	.2050	.1191
-1.367	-1.3523	.1253	.1661	.0472
-1.402	-1.3865	.0933	.1957	.0028
-1.437	-1.4035	.0635	.2507	.1424
-1.472	-1.4145	.0325	.1107	.5145
-1.507	-1.4245	.0022	.0732	-.2207
-1.542	-1.4322	-.0732	-.2207	-.3296
-1.577	-1.4392	0 = -3.863	MACH = .89753	0 = 598.58
-1.612	-1.4452	.6020	.5970	.3390 .9250

DEPENDENT VARIABLE CP

X/CV	-339	.039	.1747	.1078
-1.262	-1.2621	.2065	.2925	.2344
-1.297	-1.2867	.1961	.2694	-.2084
-1.332	-1.3182	.1582	.2050	.1191
-1.367	-1.3523	.1253	.1661	.0472
-1.402	-1.3865	.0933	.1957	.0028
-1.437	-1.4035	.0635	.2507	.1424
-1.472	-1.4145	.0325	.1107	.5145
-1.507	-1.4245	.0022	.0732	-.2207
-1.542	-1.4322	-.0732	-.2207	-.3296
-1.577	-1.4392	0 = -3.863	MACH = .89753	0 = 598.58
-1.612	-1.4452	.6020	.5970	.3390 .9250

DATE 14 FEB 76

TABLED PRESSURE DATA - DA148 (AMES 11-073-1)

A. 1.50 = 11.978		BETA (3) = 4.261		MACH = .89753		Q = 598.50		P = 1061.4		RN/L = 3.6129	
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP						(XE8V43)	
Z / EV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X / CV	.000	.3+27	.1292	.0409	.0396	-.1390					
	.025	-.1	.6319	-.7932	-.3401	-.2882					
	.050	-.5633	-.5205	-.7619	-.3355	-.2671					
	.150	-.1428	-.4102	-.5476	-.3380	-.2570					
	.300	-.3331	-.4223	-.1730	-.3349	-.3121					
	.520	-.5072	-.0852	.1454	-.1398	-.3728					
	.665	-.4116	.0865	.2218	.1495	.1506	-.0225				
	.775	-.3077	.0347	.0467	.0549	.0451	-.0215				
	.900	-.0958	-.0978	-.0959	-.1175	-.1499	-.3408				
							-.3406				

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Figure 14-6E8 76

TABULATED PRESSURE DATA - 0A148 (AMES 11-073) - 140A/B/C/R ORB VE IT

PAGE 6840
XEBW44 1 13 AUG 75 1

BANETRIC DATA

DATE 14 FEB 76

TABULATED PRESSURE DATA - OAI49 (AMES 11-073-1)

PAGE 6841

AMES 11-07310A149 - 140A/B/C/R ORB VERTICAL						(XEBW44)	
SECTION 11 VERTICAL						DEPENDENT VARIABLE CP	
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.4986	.4616	.5289	.5027	.4413		
.025	-.0420	-.2969	-.2307	-.0547	-.2604		
.050	-.0859	-.0126	.0176	.0478	.0234		
.150	-.0162	-.0446	.0589	.0715	.0460		
.300	-.0800	-.0734	.0932	.1001	.0290		
.520	-.2706	.1063	.2515	.2010	.0139		
.695	-.2898	.1911	.2056	.2199	.1668		
.775	-.2535	.0539	.0752	.0618	.0594		
.900	-.1253	-.1472	-.1450	-.1383	-.1232		
A ₁ PHA (1) = -3.992	BETA (3) = 4.269	MACH = 4.269	MACH = .59610	0	.593.75	P	= 2387.2
SECTION 11 VERTICAL							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.3301	.1890	.2484	.1443	.1089		
.025	-.3233	-.5970	-.4196	-.3304	-.8639		
.050	-.2640	-.4739	-.3730	-.2942	-.6932		
.150	-.2310	-.3466	-.2618	-.2450	-.2113		
.300	-.2128	-.2137	-.1116	-.1322	-.1163		
.520	-.3433	.0279	.0684	.0294	-.0653		
.585	-.3179	-.0985	-.2080	.0750	.1528	.0417	
.775	-.2781	-.0175	.0226	-.0194	-.0026	-.0752	
.900	-.1933	-.1895	-.2093	-.1864	-.1478	-.2514	
A ₁ PHA (1) = -4.007	BETA (5) = 8.349	MACH = 8.349	MACH = .59610	0	.593.75	P	= 2387.2
SECTION 11 VERTICAL							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.025	-.0599	-.4428	-.3323	-.2726	-.1640		
.050	-.5975	-.0430	-.8153	-.4854	-.4275		
.150	-.7363	-.8645	-.7895	-.4736	-.3283		
.300	-.3738	-.4909	-.7058	-.4627	-.2979		
.520	-.4220	-.0238	-.4086	-.3815	-.2717		
.695	-.3246	-.0238	-.2111	-.2435	-.3397	-.3297	
.775	-.2971	-.0343	.0072	-.1298	-.2721	-.2991	
.900	-.2536	-.2143	-.1539	-.2794	-.2755	-.2953	

SECTION 11 VERTICAL PAGE IS
SECTION 11 VERTICAL PAGE IS

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

PAGE 683

ALPHA (2) = .049 BETA (4) = 4.248 MACH = .59632 O = 593.96 P = 2386.1 RNL = 4.8783

SECTION 1 (VERTICAL)

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .2791 .1221 .1705 .0693 .0056

.025 -.3800 -.6047 -.447 -.3113 -.8053

.050 -.3206 -.5316 -.3879 -.2719 -.2873

.150 -.2816 -.3961 -.2934 -.1986 -.1003

.300 -.2484 -.2311 -.1702 -.0284 -.0562

.520 -.3576 .0167 .0487 .0431 -.2406

.695 -.3092 .0944 -.1985 .1183 .0431

.775 -.2660 .0184 -.0038 -.0335 -.0330

.5 .3 -.1983 -.2191 -.2052 -.2118 -.1003

ALPHA (2) = .044 BETA (5) = 8.307 MACH = .59632 O = 593.96 P = 2386.1 RNL = 4.8783

SECTION 1 (VERTICAL)

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 -.1263 -.5093 -.4204 -.3757 -.2756

.025 -.6212 -.1.0977 -.8235 -.5221 -.4079

.050 -.6251 -.9020 -.8237 -.5173 -.3807

.150 -.7895 -.5117 -.8098 -.5235 -.3259

.300 -.4125 -.4775 -.7468 -.5178 -.3062

.520 -.4158 -.0795 -.4076 -.3513 -.2711

.695 -.3370 .0086 -.2103 -.2386 -.3613

.775 -.2976 -.0586 -.0172 -.0664 -.2942 -.2442

.900 -.3000 -.2447 -.2433 -.1405 -.2866 -.2061

ALPHA (3) = 3.950 BETA (1) = -7.902 MACH = .59694 O = 595.02 P = 2385.4 RNL = 4.8783

SECTION 1 (VERTICAL)

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 -.0669 -.3728 -.3935 -.1513 -.1378

.025 -.3931 -.3484 .4377 .4122 -.3475

.050 -.3937 .3022 .3994 .3860 -.3197

.150 -.1933 .1936 .3066 .2856 -.2107

.300 .0719 .1004 .2570 .2196 .1167

.520 -.1551 .2211 .2955 .2285 .0397

.695 -.2513 .2697 -.1868 .2483 .1963

.775 -.2625 .1503 .1414 .1208 .1098 .0471

.900 -.3471 -.0569 -.0854 -.0726 -.0448

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6846

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL (XEBV44)

ALPHA (4) = 8.040 BETA (3) = .178 MACH = .59616 Q = 593.73 P = 2386.3 RNL = 4.8652

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250 X/CV

Z/BV	X/CV	BETA (4)	MACH	Q	P	RNL
.000	.7955	.3171	.7726	.3350	.2569	
.025	-.1054	-.3400	-.2151	-.1226	-.2451	
.050	-.0147	-.0963	-.0200	.0117	-.0243	
.150	-.0850	-.1200	.0065	.0148	-.0069	
.200	-.1668	-.1233	.0401	.0441	-.0205	
.420	-.3025	-.0845	.1702	.1219	-.0325	
.695	-.2737	-.1665	.1768	.1244	-.1828	
.775	-.2146	.0510	.0313	.0103	-.0415	
.900	-.1198	-.1820	-.1820	-.1766	-.1283	

ALPHA (4) = 8.039 BETA (4) = 4.241 MACH = .59616 Q = 593.73 P = 2386.3 RNL = 4.8652

SECTION 1) VERTICAL

Z/BV	X/CV	BETA (4)	MACH	Q	P	RNL
.000	.2179	.0325	.0412	.0814	.1629	
.135	-.1846	-.6428	-.6596	-.3732	-.6307	
.155	-.3516	-.6219	-.4242	-.3375	-.5126	
.160	-.5671	-.7321	-.3758	-.3687	-.3923	
.180	-.2932	-.2514	-.1922	-.2329	-.0561	
.185	-.5555	.0213	-.0691	.0693	-.0708	
.205	-.2637	.1032	-.1909	.0372	.1073	
.275	-.2432	-.0086	-.0274	.0309	.0630	
.300	-.1771	-.2352	-.1948	-.2220	-.1064	

ALPHA (4) = 8.039 BETA (5) = 8.285 MACH = .59616 Q = 593.73 P = 2386.3 RNL = 4.8652

SECTION 1) VERTICAL

Z/BV	X/CV	BETA (5)	MACH	Q	P	RNL
.000	.3170	.4590	.6020	.6970	.8390	.9250
.135	-.2094	-.6724	-.5721	-.5198	-.4402	
.150	-.7216	-.1193	-.8057	-.5422	-.3817	
.155	-.7365	-.1075	-.8031	-.5392	-.3638	
.160	-.9223	-.1075	-.8052	-.5796	-.3409	
.180	-.4336	-.4405	-.8033	-.5557	-.3192	
.200	-.4257	-.1359	-.4038	-.3706	-.3508	
.225	-.3575	-.0363	-.2110	-.4476	-.3153	
.250	-.3332	-.5718	-.0861	-.104	-.2852	
.300	-.2267	-.2267	-.1059	-.2752	-.2378	

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TABULATED PRESSURE DATA - OA14B 1 AMES 11-073-1

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

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ALPHA (5) = 12.021 BETA (1) = -7.852 MACH = .59616 Q = 593.74 P = 2386.7 RN/L = 4.865%

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CY	0.000	-1.339	-5481	-5665	-3196	-3064
	.025	.2747	.2982	.3663	.3663	.3317	.2572
	.050	.2272	.2647	.3416	.2746	.3208	.2527
	.075	.0857	.1482	.2246	.2246	.2355	.1449
	.100	.0020	.0848	.2530	.2530	.1815	.0636
	.125	.1762	.2283	.2121	.2097	.1393	.1971
	.150	.2622	.2965	.1398	.0988	.0903	.0040
	.175	.2535	.1924	.0023	.0006	.0012	.1928
	.200	.1580	.3170	.4590	.6020	.6970	.8390

ALPHA (5) = 11.932 BETA (2) = -3.840 MACH = .59616 Q = 593.74 P = 2386.7 RN/L = 4.865%

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CY	0.000	-1.339	-5490	-6020	.6970	.8390	.9250
	.025	.2556	.0417	.0015	.0015	.0456	.0281	
	.050	.1571	.1269	.2569	.2569	.2420	.2020	
	.075	.1471	.1119	.2211	.2211	.2268	.1768	
	.100	.0203	.0319	.1618	.1618	.1518	.0816	
	.125	.0852	.0207	.1602	.1602	.1146	.0196	
	.150	.2615	.1524	.2133	.2133	.1511	.0333	
	.175	.2809	.2319	.1865	.1760	.1744	.1245	
	.200	.2337	.1271	.0896	.0560	.0477	.0202	
	.225	.1047	.-1.330	.-1.238	.-1.114	.-0.964	.-1.826	
	.250	.3093	.0956					
	.275	.2732	.1589	.1870	.1235	.1249	.0956	.-0.413
	.300	.2338	.0492	.0207	.-0.117	.-0.112	.-0.536	.-2043
	.325	.1220	.-1.953	.-1.937	.-1.806	.-1.392	.-1.834	

ALPHA (5) = 11.945 BETA (3) = .176 MACH = .59616 Q = 593.74 P = 2386.7 RN/L = 4.865%

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CY	0.000	-1.339	-5490	-6020	.6970	.8390	.9250
	.025	.3740	.2808	.3282	.3282	.2914	.2091	
	.050	.1104	.3450	.2110	.2110	.1297	.2508	
	.075	.0217	.1102	.0289	.0289	.0024	.0394	
	.100	.1018	.1305	.0037	.0037	.0017	.0234	
	.125	.1750	.1319	.0302	.0302	.0269	.0352	
	.150	.3093	.0956	.1517	.1517	.1082	.0413	
	.175	.2732	.1589	.1870	.1235	.1249	.0956	.-0.413
	.200	.2338	.0492	.0207	.-0.117	.-0.112	.-0.536	.-2043
	.225	.1220	.-1.953	.-1.937	.-1.806	.-1.392	.-1.834	

(XEBW44)

(XEBW44)

(XEBW44)

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

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ALPHA (51) = 11.941		BETA (4) = 4.247		MACH = .59616		P = 593.74		RNL = 4.8854	
SECTION 1 (VERTICAL)				DEPENDENT VARIABLE CP				(XE8044)	
Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CY									
.000	.2139	-.0039		-.0205		-.1532		-.2384	
.025	-.3924	.6697		-.4931		-.3783		-.5682	
.050	-.2561	.5579		-.4528		-.3594		-.4767	
.075	-.1587	-.3321		-.4153		-.4242		-.3363	
.100	-.3021	-.2531		-.1848		-.2322		-.0850	
.125	-.2743	.1557		.0603		.0747		.0746	
.150	-.2515	.1057		.0184		.1016		.2024	
.175	-.2338	.0152		-.0429		-.0165		-.2158	
.200	-.1757	-.1757		-.2516		-.2128		-.1930	
ALPHA (51) = 11.926	BETA (51) = 8.307	MACH = .59616	P = 593.74	RNL = 4.8854					
SECTION 1 (VERTICAL)									
Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CY									
.000	.2138	-.0036		-.6616		-.5355		-.4816	
.025	-.3924	.6554		-.8396		-.5346		-.3698	
.050	-.2563	-.1531		-.1539		-.5211		-.3502	
.075	-.1583	-.0839		-.6649		-.5636		-.3323	
.100	-.3023	-.0419		-.1784		-.5537		-.3314	
.125	-.2743	-.0115		-.1763		-.4359		-.3246	
.150	-.2515	-.0057		-.2235		-.4536		-.2828	
.175	-.1757	-.0011		-.0054		-.2983		-.3265	
.200	-.1757	-.0013		-.1504		-.2071		-.2810	
						-.2561		-.2711	

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORG VERTICAL

REFERENCE DATA

X _{REF}	=	2590.0000	SO.FT.	X _{WRP}	=	1076.6800	IN. X0
Z _{REF}	=	.47+.8700	IN.	Y _{WRP}	=	.0000	IN. Y0
BREF	=	936.0660	IN.	Z _{WRP}	=	375.0000	IN. Z0
SCALE	=	.0300					

A₁PH_A (1) = -3.961 BETA (1) = -3.852 MACH = .89683 0 = 597.89 P = 1061.9 RML = 3.6441

SECTION 1 INVERTICAL

X/CV							DEPENDENT VARIABLE CP
.000	.4857	.3603	.3949	.4869	.4253		
.025	.3538	.2327	.3733	.4183	.3601		
.050	.3339	.2272	.3489	.3963	.3381		
.150	.2007	.1383	.2953	.3207	.2500		
.300	.2610	.1639	.2908	.2825	.1764		
.520	.1429	.2154	.4284	.3305	.1014		
.745	.2554	.3425	.2197	.3937	.3345		
.775	.2558	.2061	.2724	.2574	.2242	.0553	.3390
.900	.0712	.1020	.0783	.0245	.1434	.3461	
A ₁ PH _A (1) = -3.932 BETA (2) = .188 MACH = .88683 0 = 597.89 P = 1061.9 RML = 3.6441							
X/CV							DEPENDENT VARIABLE CP
.000	.5559	.4638	.5598	.5619	.4763		
.025	.0411	-.2601	-.2185	-.0464	-.1541		
.050	.1543	.0009	.0587	.1019	.0577		
.150	.0529	-.0587	.1209	.1531	.1286		
.300	-.0881	-.0928	.1672	.1902	.1109		
.520	-.2577	-.1174	.3591	.2998	.0812		
.695	-.2985	.2856	.2221	.3439	.2679	.0395	
.775	-.2285	.1460	.2178	.2149	.1854	.0260	.3398
.900	.0101	.0537	.0366	-.0097	-.1664	-.3483	

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(13 AUG 75)

PARAMETRIC DATA

RUDDER	=	.000	SPIDERX	=	55.000
BDFLAP	=	22.500	L-ELVN	=	4.000
R-ELVN	=	4.000	MACH	=	.900

ORIGINAL PAGE IS
OF POOR QUALITY

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TABULATED PRESSURE DATA - DATA 148 (AMES 11-073-1)

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AMES 11-073-10A148) -140A/B/C/R ORB VERTICAL

$\text{ALPHA} (2) = .019 \quad \text{BETA} (3) = 4.247 \quad \text{MACH} = .89560 \quad 0 = 597.56 \quad P = 1061.9 \quad \text{PAUL} = 3.6228$

SECTION 1 INVERTICAL

 $Z/BV = .1580 \quad .3170 \quad .4590 \quad .6020 \quad .6970 \quad .8390 \quad .9250$

X/CD	.000	.4229	.2751	.2597	.2252	.1566
	.025	-.2782	-.7317	-.6209	-.2223	-.1789
	.050	-.1855	-.6110	-.6280	-.2199	-.1591
	.150	-.1979	-.3505	-.5450	-.2204	-.1489
	.300	-.2951	-.3768	-.3274	-.2254	-.1827
	.500	-.4519	-.0305	-.2106	-.3056	-.1689
	.695	-.3429	-.1639	-.1684	-.2323	-.2884
	.775	-.2508	-.0750	-.1484	-.1733	-.3057
	.900	-.0517	-.0059	.0040	.0287	-.3199

$\text{ALPHA} (3) = 3.946 \quad \text{BETA} (1) = -3.873 \quad \text{MACH} = .89837 \quad 0 = 599.08 \quad P = 1060.5 \quad \text{PAUL} = 3.6099$

SECTION 1 INVERTICAL

 $Z/BV = .1590 \quad .3170 \quad .4590 \quad .6020 \quad .6970 \quad .8390 \quad .9250$

X/CD	.000	.3771	.2231	.2190	.3307	.2754
	.025	-.2219	-.1213	-.3238	-.3612	-.3052
	.050	-.2150	-.1246	-.2995	-.3411	-.2916
	.150	-.0895	-.0457	-.2450	-.2663	-.1884
	.200	-.0263	-.0043	-.2504	-.2284	-.1161
	.230	-.1928	-.1852	-.3595	-.2545	-.0614
	.265	-.2364	-.1934	-.2377	-.3167	-.2403
	.775	-.2364	-.0910	-.0710	-.0277	-.2899
	.500					

$\text{ALPHA} (3) = 4.002 \quad \text{BETA} (2) = -184 \quad \text{MACH} = .89837 \quad 0 = 599.08 \quad P = 1060.5 \quad \text{PAUL} = 3.6099$

SECTION 1 INVERTICAL

 $Z/BV = .1580 \quad .3170 \quad .4590 \quad .6020 \quad .6970 \quad .8390 \quad .9250$

X/CD	.000	.4811	.3184	.4392	.4458	.3301
	.025	-.0321	-.3579	-.2050	-.0755	-.1442
	.050	-.0492	-.1170	-.0299	-.0874	-.0323
	.150	-.0669	-.1348	-.0635	.1032	.0770
	.300	-.1930	-.1493	-.1255	-.1354	-.0548
	.500	-.3032	-.1023	-.2872	.2183	.0261
	.750	-.2535	-.0559	-.1857	.2713	.2694
	.775	-.2535	-.1263	-.1565	.1253	.1969
	.800	-.0376	.0165	-.0158	-.0580	-.3209

AMES 11-073(OA148) - 1404B/C/R ORB VERTICAL

(XE5745)

$t = 3.247$ DATA (3) = 4.239 MACH = .99837 Q = 599.08 P = 1060.5 FVL = 3.5099

DEPENDENT VARIABLE CP

1.000	.3170	.4550	.6020	.6970	.8390	.9250
2.000	.2174	.1669	.1418	.0669		
3.000	.1614	.0320	.2353	.1957		
4.000	.0963	.6030	.2216	.1801		
5.000	.0498	.5798	.2233	.1640		
6.000	.0269	.2416	.2431	.2006		
7.000	.0146	.0616	.1831	.2532		
8.000	.0076	.2007	.2193	.1719		
9.000	.0036	.1234	.2023	.1116		
10.000	.0016	.0322	.2037	.1231		
11.000	.0007	.0052	.0050	.3078		

$t = 3.247$ DATA (1) = 3.266 MACH = .99753 Q = 598.50 P = 1061.4 FVL = 3.5237

DEPENDENT VARIABLE CP

1.000	.3170	.4550	.6020	.6970	.8390	.9250
2.000	.2174	.1669	.2588	.1955		
3.000	.1614	.0320	.3293	.2773		
4.000	.0963	.6030	.1732	.2511		
5.000	.0498	.5798	.1455	.1536		
6.000	.0269	.2416	.1633	.0856		
7.000	.0146	.0616	.2288	.0277		
8.000	.0076	.2007	.3341	.2562		
9.000	.0036	.1234	.369	.1013		
10.000	.0016	.0322	.3487	.305		
11.000	.0007	.0052	.3487	.305		

$t = 3.247$ DATA (2) = 3.266 MACH = .99753 Q = 598.50 P = 1061.4 FVL = 3.5237

1.000	.3170	.4550	.6020	.6970	.8390	.9250
2.000	.2174	.1669	.2588	.1955		
3.000	.1614	.0320	.3293	.2773		
4.000	.0963	.6030	.1732	.2511		
5.000	.0498	.5798	.1455	.1536		
6.000	.0269	.2416	.1633	.0856		
7.000	.0146	.0616	.2288	.0277		
8.000	.0076	.2007	.3341	.2562		
9.000	.0036	.1234	.369	.1013		
10.000	.0016	.0322	.3487	.305		
11.000	.0007	.0052	.3487	.305		

$t = 3.247$ DATA (3) = 3.266 MACH = .99753 Q = 598.50 P = 1061.4 FVL = 3.5237

1.000	.3170	.4550	.6020	.6970	.8390	.9250
2.000	.2174	.1669	.2588	.1955		
3.000	.1614	.0320	.3293	.2773		
4.000	.0963	.6030	.1732	.2511		
5.000	.0498	.5798	.1455	.1536		
6.000	.0269	.2416	.1633	.0856		
7.000	.0146	.0616	.2288	.0277		
8.000	.0076	.2007	.3341	.2562		
9.000	.0036	.1234	.369	.1013		
10.000	.0016	.0322	.3487	.305		
11.000	.0007	.0052	.3487	.305		

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TABULATED

SECTION (1) VERTICAL

ALPHA (4) = 7.978 BETA (3) = .140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

ALPHA (4) = 11.950 BETA (1) = -3.856 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (5) = 11.961 BETA (2) = .178 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (5) = 11.961 BETA (1) = -3.856 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (4) = 7.978 BETA (3) = .140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

ALPHA (4) = 11.950 BETA (1) = -3.856 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (5) = 11.961 BETA (2) = .178 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (4) = 7.978 BETA (3) = .140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

ALPHA (4) = 11.950 BETA (1) = -3.856 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (5) = 11.961 BETA (2) = .178 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (4) = 7.978 BETA (3) = .140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

ALPHA (4) = 11.950 BETA (1) = -3.856 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (5) = 11.961 BETA (2) = .178 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (4) = 7.978 BETA (3) = .140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

ALPHA (4) = 11.950 BETA (1) = -3.856 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (5) = 11.961 BETA (2) = .178 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (4) = 7.978 BETA (3) = .140A/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

ALPHA (4) = 11.950 BETA (1) = -3.856 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

SECTION (1) VERTICAL

ALPHA (5) = 11.961 BETA (2) = .178 MACH = .89653 Q = 597.97 P = 1062.9 RN/L = 3.5856

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(XEBV45)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

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ALPHA (5) = 11.950 BETA (3) = 4.259 MACH = .89653 Q = 597.97

RANL = 1062.9 P = 1062.9 RANL = 3.5856

SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4560	.6020	.6970	.8390	.9250
X/CY	.3489	.1494		.0426		-.0279	-.1351
.025	-.1255	-.6436		-.7521		.3100	-.2859
.050	-.0589	-.5199		-.7490		-.3181	-.2641
.150	-.1429	-.3915		-.5417		-.3287	-.2537
.350	-.3275	-.4107		-.1643		.3259	-.2985
.4988	-.0376			-.1619		-.1469	-.3479
.695	-.3856	-.1006		-.2451		-.0378	-.3086
.75	-.2853	-.0063		-.0541		-.0274	-.3120
.80	-.0516	-.0897		-.0880		-.1043	-.3057

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF =	2630.0000	SQ.FT.	XMRP =	1076.6800	IN. X0
LREF =	.474.8000	IN.	YMRP =	.0000	IN. Y0
BREF =	936.0680	IN.	ZMRP =	375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -4.081 BETA (1) = -7.851 MACH = .59592 Q = .593.39 P = 2387.4 RNL = 4.8516
 SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.0173	-.2393	-.2407	.0081	-.0235
	.025	.4756	.4449	.5399	.4996
	.050	.4506	.3938	.4774	.4633
	.150	.2834	.2677	.3707	.3495
	.300	.1449	.1565	.3116	.2748
	.520	-.1238	.2457	.3585	.2859
	.655	-.2752	.2926	-.1830	.0557
	.775	-.2670	.1643	.1776	.1521
	.900	-.0299	-.0560	-.0546	.3080
				-.0442	-.0414

ALPHA (1) = -3.953 BETA (2) = -3.833 MACH = .59592 Q = .593.39 P = 2387.4 RNL = 4.8516
 SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.3637	.2482	.2578	.3456	.2808
	.025	.3165	.2505	.3550	.3617
	.050	.2923	.2334	.3249	.3375
	.150	.1641	.1307	.2443	.2884
	.300	.0425	.0529	.2168	.2410
	.520	-.1549	.1852	.3161	.2017
	.665	-.2824	.2495	-.1819	.2167
	.775	-.2624	.1155	.1391	.2670
	.900	-.0589	-.0902	-.0928	.2713
				-.0951	.1072

ORIGINAL IMAGE IS
OF POOR QUALITY

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(XEBV46) (13 AUG 75)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (+ 1) = -3.951		BETA (+ 3) = .188	MACH = .6970	P = .593.39	RNL = 4.8516
SECTION 11: VERTICAL		DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.8330 .9250
A/CY	.4969	.4651	.5293	.5029	.4418
.025	-.0271	-.2872	-.2065	-.0475	-.2438
.050	-.0974	-.0543	.0306	.0592	.0347
.150	-.2293	-.0421	.0672	.0741	.0529
.350	-.0706	-.0651	.0978	.1023	.0370
.550	-.2694	-.1126	.2575	.2065	-.0057
.750	-.2212	-.1975	.1833	.2284	.1959
.775	-.2558	-.0814	.0691	.0639	-.2374
.950	-.1175	-.1366	-.1341	-.1362	-.1153
ALPHA (+ 1) = -3.958	BETA (+ 3) = .269	MACH = .6020	P = .593.39	RNL = 4.8516	
SECTION 11: VERTICAL		DEPENDENT VARIABLE CP			
Z/B	.1580	.3170	.4590	.6020	.8330 .9250
A/CY	.2370	.1269	.2525	.1350	.1063
.025	-.2128	-.5754	-.4073	-.3238	-.8377
.050	-.2577	-.4666	-.3555	-.2921	-.6757
.150	-.2283	-.2331	-.3517	-.2415	-.1998
.350	-.1361	-.2122	-.1027	-.1256	-.1061
.750	-.3212	-.2277	-.0742	.0404	-.0561
.775	-.3121	-.1244	-.1642	.0359	-.2182
.950	-.2727	-.1277	-.0269	.0155	-.0207
ALPHA (+ 1) = -3.973	BETA (+ 3) = .335	MACH = .6020	P = .593.39	RNL = 4.8516	
SECTION 11: VERTICAL		DEPENDENT VARIABLE CP			
Z/B	.1580	.2170	.4590	.6020	.8330 .9250
A/CY	.0577	-.1189	-.3337	-.2933	-.1863
.025	-.5758	-.1267	-.7949	-.5047	-.4492
.050	-.5536	-.8219	-.7934	-.5000	-.4112
.150	-.1226	-.8224	-.6769	-.4791	-.3541
.350	-.2750	-.4711	-.7754	-.4736	-.3147
.750	-.3222	-.0955	-.2443	-.3032	-.2925
.775	-.3353	-.1198	-.1672	-.1401	-.2713
.950	-.2312	-.1258	-.0134	-.2585	-.3035
Z/B	-.0663	-.2068	-.763	-.2822	-.2500

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-07310A14B) - 140A/B/C/R ORB VERTICAL
 (XEBV46)

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/EV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	P = 2386.3	RNL = 4.8479
X/CV	.000	-.0357	-.3187	-.3171	-.0646	-.0605			
	.025	.4379	.3941	.4876	.4530	.3959			
	.050	.3910	.3520	.4290	.4256	.3630			
	.150	.2399	.2290	.3389	.3174	.2386			
	.300	.1154	.1272	.2805	.2519	.1462			
	.520	-.1418	.2331	.3264	.2613	.0625			
	.685	-.2785	.2783	-.1710	.2769	.2791	.2272	-.1312	
	.775	-.2676	.1579	.1554	.1347	.1292	.0606	-.1265	
	.900	-.0416	-.0871	-.0745	-.0634	-.0279	-.0981		
ALPHA 1 2) =	.070	BETA 1 2) =	-.3865	MACH =	.594.08	0			
SECTION 1 INVERTICAL									
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CV	.3264	1839	1848	1848	2650	2073			
	.2684	.2228	.3334	.3334	.3324	.2845			
	.2447	.2004	.2914	.2914	.3051	.2531			
	.150	.1216	.1005	.2219	.2200	.1594			
	.200	.0076	.0341	.1966	.1744	.0918			
	.520	-.2056	.1741	.2590	.2447	.0135			
	.685	-.2795	.2348	-.1665	.2412	.2452	.2004	-.1867	
	.775	-.2452	.1116	.1152	.0931	.0889	.0183	-.1984	
	.900	-.0753	-.1130	-.1038	-.1031	-.0834	-.1853		
ALPHA 1 2) =	.070	BETA 1 3) =	.181	MACH =	.594.08	0			
SECTION 1 INVERTICAL									
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250		
X/CV	.4549	.4074	.4745	.4745	.4440	.3747			
	-.0651	-.3067	-.2091	-.2091	-.0671	-.2592			
	.0540	-.0375	.0046	.0046	.0336	.0111			
	.150	-.0151	-.0702	.0478	.0570	.0317			
	.300	-.1092	-.0861	.2249	.1823	.0175			
	.520	-.2755	.0957	.1941	.1998	.0139			
	.685	-.2841	.1871	.1669	.0412	.2101			
	.775	-.2440	.0589	.0600	.1503	.1169	.2149		
	.900	-.1267	-.1635	-.1552	-.1169	-.1901			

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TABULATED PRESSURE DATA - O114P (AMES 11-073-1)

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AMES 11-073(O114P) -140A/B/C/R ORB VERTICAL

(XEB146)

ALPHA (2) = .268	BETA (4) = 4.248	MACH = .59634	Q = 594.08	P = 2386.3	RNL = 4.8479
SECTION 1 INVERTICAL		DEPENDENT VARIABLE CP			
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250					

X/CV .000 .2768 .1300 .1771 .0686 .0154	.3572 .5956 .4316 .3317 -.7734	.3109 .5157 .3795 .2991 .6250	.2593 .3662 .2850 .2657 .2924	.2335 .2197 .1603 .1956 .0905	.2458 .345 .0637 .0389 .0585	.3046 .1570 .1723 .1155 .0625 .2329	.2629 .2053 .0067 .0299 .0352 .2129	.1830 .1830 .2067 .1966 .2020 .0952 .2098
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ALPHA (2) = .055	BETA (5) = 9.306	MACH = .59634	Q = 594.08	P = 2386.3	RNL = 4.8479
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SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

C ₁ .102 .5018 .4081 .3955 .2848	.115 .350 .8106 .5381 .4156	.135 .350 .8223 .5379 .3848	.155 .9501 .8056 .5433 .3372	.175 .4565 .7346 .5299 .3068	.195 .0744 .7375 .3457 .2549	.215 .0667 .1800 .3250 .2555	.235 .2657 .0211 .9883 .2813 .2495	.255 .2307 .2433 .1517 .2973 .1936 .2507
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ALPHA (2) = 4.012	BETA (1) = -7.901	MACH = .59704	Q = 595.39	P = 2386.0	RNL = 4.8469
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SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

C ₁ .0740 -.3788 -.4075 -.1538 -.1433	.0940 .3520 .4386 .4165 .3520	.1140 .3490 .5121 .4033 .3217	.1340 .2603 .2019 .3113 .2859	.1540 .2961 .1125 .2596 .2883	.1740 .1473 .2242 .2991 .2214 .1194	.1940 .1252 .1232 .1575 .2490 .2520 .0409	.2140 .1251 .1534 .1475 .1205 .1101 .0504 .1159	.2340 .0398 .0398 -.0890 -.0811 -.0668 -.0345 -.1069
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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

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ALPHA (3) = 4.016 BETA (2) = -3.862 MACH = .59704 0 = 595.39 P = 2386.0 RNL = 4.8469

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/B: .1590 .3170 .4590 .6020 .6970 .8390 .9250

X(CV)

.023	.2626	.1238	.1167	.1855	.1195
.025	.2207	.1806	.3057	.3001	.2583
.050	.1956	.1619	.2586	.2786	.2312
.150	.0823	.0743	.1926	.1921	.1308
.250	-.0286	.0674	.1721	.1530	.0694
.350	-.2183	.1671	.2628	.2096	.0042
.450	-.2332	.2275	.1546	.2214	.34
.750	-.2460	.1057	.0818	.0790	.188
.915	-.0753	-.1150	-.1058	-.0936	-.1736
					-.1581

ALPHA (3) = 4.027 BETA (3) = .191 MACH = .59704 0 = 595.39 P = 2386.0 RNL = 4.8469

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/B: .1590 .3170 .4590 .6020 .6970 .8390 .9250

X(CV)

.000	.4196	.3606	.4195	.3827	.3108
.025	-.0508	-.3312	-.2055	-.0933	-.2465
.050	.0159	-.0512	-.0060	.0155	-.0068
.150	-.6490	-.0935	.0306	.0331	.0083
.350	-.1334	-.1035	.0574	.0584	-.0070
.620	-.2845	.0685	.1994	.1504	-.0324
.625	-.2753	.1729	-.1592	.1657	.1448
.775	-.2226	.0535	.0499	.0225	.0171
.900		-.1227	-.1678	-.1699	-.1626
					-.1254
					-.2017

ALPHA (3) = 4.030 BETA (4) = 4.239 MACH = .59704 0 = 595.39 P = 2386.0 RNL = 4.8469

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/B: .1590 .3170 .4590 .6020 .6970 .8390 .9250

X(CV)

.000	.2373	.0791	.1093	-.0049	-.0791
.025	-.3734	-.6295	-.4499	-.3420	-.7013
.050	-.3391	-.5659	-.3976	-.3199	-.5548
.150	-.3022	-.3767	-.3194	-.3037	-.4036
.250	-.2560	-.2278	-.1768	-.2125	-.0516
.450	-.3390	-.0225	-.0714	-.0658	-.0589
.490	-.2913	-.153	-.1661	-.0952	-.1812
.575	-.2562	-.123	-.0077	-.0529	-.049
.625		-.174	-.2205	-.1819	-.0815
					-.2080

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL
 SETA (1) = 0.288 MACH = .5970⁴ Q = 595.39 P = 2386.0 RN/L = 4.6469

DEPENDENT VARIABLE CP

SETA (1)	MACH	P	RN/L
0.00	.5922	.59620	.3724
.05	.5912	.59620	.3724
.10	.5902	.59620	.3724
.15	.5892	.59620	.3724
.20	.5882	.59620	.3724
.25	.5872	.59620	.3724
.30	.5862	.59620	.3724
.35	.5852	.59620	.3724
.40	.5842	.59620	.3724
.45	.5832	.59620	.3724
.50	.5822	.59620	.3724
.55	.5812	.59620	.3724
.60	.5802	.59620	.3724
.65	.5792	.59620	.3724
.70	.5782	.59620	.3724
.75	.5772	.59620	.3724
.80	.5762	.59620	.3724
.85	.5752	.59620	.3724
.90	.5742	.59620	.3724
.95	.5732	.59620	.3724
1.00	.5722	.59620	.3724
1.05	.5712	.59620	.3724
1.10	.5702	.59620	.3724
1.15	.5692	.59620	.3724
1.20	.5682	.59620	.3724
1.25	.5672	.59620	.3724
1.30	.5662	.59620	.3724
1.35	.5652	.59620	.3724
1.40	.5642	.59620	.3724
1.45	.5632	.59620	.3724
1.50	.5622	.59620	.3724
1.55	.5612	.59620	.3724
1.60	.5602	.59620	.3724
1.65	.5592	.59620	.3724
1.70	.5582	.59620	.3724
1.75	.5572	.59620	.3724
1.80	.5562	.59620	.3724
1.85	.5552	.59620	.3724
1.90	.5542	.59620	.3724
1.95	.5532	.59620	.3724
2.00	.5522	.59620	.3724
2.05	.5512	.59620	.3724
2.10	.5502	.59620	.3724
2.15	.5492	.59620	.3724
2.20	.5482	.59620	.3724
2.25	.5472	.59620	.3724
2.30	.5462	.59620	.3724
2.35	.5452	.59620	.3724
2.40	.5442	.59620	.3724
2.45	.5432	.59620	.3724
2.50	.5422	.59620	.3724
2.55	.5412	.59620	.3724
2.60	.5402	.59620	.3724
2.65	.5392	.59620	.3724
2.70	.5382	.59620	.3724
2.75	.5372	.59620	.3724
2.80	.5362	.59620	.3724
2.85	.5352	.59620	.3724
2.90	.5342	.59620	.3724
2.95	.5332	.59620	.3724
3.00	.5322	.59620	.3724
3.05	.5312	.59620	.3724
3.10	.5302	.59620	.3724
3.15	.5292	.59620	.3724
3.20	.5282	.59620	.3724
3.25	.5272	.59620	.3724
3.30	.5262	.59620	.3724
3.35	.5252	.59620	.3724
3.40	.5242	.59620	.3724
3.45	.5232	.59620	.3724
3.50	.5222	.59620	.3724
3.55	.5212	.59620	.3724
3.60	.5202	.59620	.3724
3.65	.5192	.59620	.3724
3.70	.5182	.59620	.3724
3.75	.5172	.59620	.3724
3.80	.5162	.59620	.3724
3.85	.5152	.59620	.3724
3.90	.5142	.59620	.3724
3.95	.5132	.59620	.3724
4.00	.5122	.59620	.3724
4.05	.5112	.59620	.3724
4.10	.5102	.59620	.3724
4.15	.5092	.59620	.3724
4.20	.5082	.59620	.3724
4.25	.5072	.59620	.3724
4.30	.5062	.59620	.3724
4.35	.5052	.59620	.3724
4.40	.5042	.59620	.3724
4.45	.5032	.59620	.3724
4.50	.5022	.59620	.3724
4.55	.5012	.59620	.3724
4.60	.5002	.59620	.3724
4.65	.4992	.59620	.3724
4.70	.4982	.59620	.3724
4.75	.4972	.59620	.3724
4.80	.4962	.59620	.3724
4.85	.4952	.59620	.3724
4.90	.4942	.59620	.3724
4.95	.4932	.59620	.3724
5.00	.4922	.59620	.3724
5.05	.4912	.59620	.3724
5.10	.4902	.59620	.3724
5.15	.4892	.59620	.3724
5.20	.4882	.59620	.3724
5.25	.4872	.59620	.3724
5.30	.4862	.59620	.3724
5.35	.4852	.59620	.3724
5.40	.4842	.59620	.3724
5.45	.4832	.59620	.3724
5.50	.4822	.59620	.3724
5.55	.4812	.59620	.3724
5.60	.4802	.59620	.3724
5.65	.4792	.59620	.3724
5.70	.4782	.59620	.3724
5.75	.4772	.59620	.3724
5.80	.4762	.59620	.3724
5.85	.4752	.59620	.3724
5.90	.4742	.59620	.3724
5.95	.4732	.59620	.3724
6.00	.4722	.59620	.3724
6.05	.4712	.59620	.3724
6.10	.4702	.59620	.3724
6.15	.4692	.59620	.3724
6.20	.4682	.59620	.3724
6.25	.4672	.59620	.3724
6.30	.4662	.59620	.3724
6.35	.4652	.59620	.3724
6.40	.4642	.59620	.3724
6.45	.4632	.59620	.3724
6.50	.4622	.59620	.3724
6.55	.4612	.59620	.3724
6.60	.4602	.59620	.3724
6.65	.4592	.59620	.3724
6.70	.4582	.59620	.3724
6.75	.4572	.59620	.3724
6.80	.4562	.59620	.3724
6.85	.4552	.59620	.3724
6.90	.4542	.59620	.3724
6.95	.4532	.59620	.3724
7.00	.4522	.59620	.3724
7.05	.4512	.59620	.3724
7.10	.4502	.59620	.3724
7.15	.4492	.59620	.3724
7.20	.4482	.59620	.3724
7.25	.4472	.59620	.3724
7.30	.4462	.59620	.3724
7.35	.4452	.59620	.3724
7.40	.4442	.59620	.3724
7.45	.4432	.59620	.3724
7.50	.4422	.59620	.3724
7.55	.4412	.59620	.3724
7.60	.4402	.59620	.3724
7.65	.4392	.59620	.3724
7.70	.4382	.59620	.3724
7.75	.4372	.59620	.3724
7.80	.4362	.59620	.3724
7.85	.4352	.59620	.3724
7.90	.4342	.59620	.3724
7.95	.4332	.59620	.3724
8.00	.4322	.59620	.3724
8.05	.4312	.59620	.3724
8.10	.4302	.59620	.3724
8.15	.4292	.59620	.3724
8.20	.4282	.59620	.3724
8.25	.4272	.59620	.3724
8.30	.4262	.59620	.3724
8.35	.4252	.59620	.3724
8.40	.4242	.59620	.3724
8.45	.4232	.59620	.3724
8.50	.4222	.59620	.3724
8.55	.4212	.59620	.3724
8.60	.4202	.59620	.3724
8.65	.4192	.59620	.3724
8.70	.4182	.59620	.3724
8.75	.4172	.59620	.3724
8.80	.4162	.59620	.3724
8.85	.4152	.59620	.3724
8.90	.4142	.59620	.3724
8.95	.4132	.59620	.3724
9.00	.4122	.59620	.3724
9.05	.4112	.59620	.3724
9.10	.4102	.59620	.3724
9.15	.4092	.59620	.3724
9.20	.4082	.59620	.3724
9.25	.4072	.59620	.3724
9.30	.4062	.59620	.3724
9.35	.4052	.59620	.3724
9.40	.4042	.59620	.3724
9.45	.4032	.59620	.3724
9.50	.4022	.59620	.3724
9.55	.4012	.59620	.3724
9.60	.4002	.59620	.3724
9.65	.3992	.59620	.3724
9.70	.3982	.59620	.3724
9.75	.3972	.59620	.3724
9.80	.3962	.59620	.3724
9.85	.3952	.59620	.3724
9.90	.3942	.59620	.3724
9.95	.3932	.59620	.3724
10.00	.3922	.59620	.3724
10.05	.3912	.59620	.3724
10.10	.3902	.59620	.3724
10.15	.3892	.59620	.3724
10.20	.3882	.59620	.3724
10.25	.3872	.59620	.3724
10.30	.3862	.59620	.3724
10.35	.3852	.59620	.3724
10.40	.3842	.59620	.3724
10.45	.3832	.59620	.3724
10.50	.3822	.59620	.3724
10.55	.3812	.59620	.3724
10.60	.3802	.59620	.3724
10.65	.3792	.59620	.3724
10.70	.3782	.59620	.3724
10.75	.3772	.59620	.3724
10.80	.3762	.59620	.3724
10.85	.3752	.59620	.3724
10.90	.3742	.59620	.3724
10.95	.3732	.59620	.3724
11.00	.3722	.59620	.3724
11.05	.3712	.59620	.3724
11.10	.3702	.59620	.3724
11.15	.3692	.59620	.3724
11.20	.3682	.59620	.3724
11.25	.3672	.59620	.3724
11.30	.3662	.59620	.3724
11.35	.3652	.59620	.3724
11.40	.3642	.59620	.3724
11.45	.3632	.59620	.3724
11.50	.3622	.59620	.3724
11.55	.3612	.59620	.3724
11.60	.3602	.59620	.3724
11.65	.3592	.59620	.3724
11.70	.3582	.59620	.3724
11.75	.3572	.59620	.3724
11.80	.3562	.59620	.3724
11.85	.3552	.59620	.3724
11.90	.3542	.59620	.3724
11.95	.3532	.59620	.3724
12.00	.3522	.59620	.3724
12.05	.3512	.59620	.3724
12.10	.3502	.59620	.3724
12.15	.3492	.59620	.3724
12.20	.3482	.59620	.3724
12.25	.3472	.59620	.3724
12.30	.3462	.59620	.3724
12.35	.3452	.59620	.3724
1			

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TABULATED PRESSURE DATA - DATA 1 AMES 11-073-1

ALPHA (4) = 8.012 BETA (3) = .176 MACH = .59670 Q = 594.93 P = 2387.1
 SECTION 1 !VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

X/CV	.3964	.3207	.3728	.3358	.2595
.000					
.025	-.0945	-.3177	-.1806	-.1143	-.2276
.050	-.0024	-.0828	-.0062	.0223	-.0190
.150	-.0734	-.1086	.0180	.0178	-.0030
.300	-.1502	-.1107	.0482	.0475	-.0216
.520	-.2898	.0884	.1753	.1270	-.0418
.635	-.2669	.1755	.1512	.1440	-.1985
.775	-.2195	.0596	.0348	.0072	-.2041
.900		-.1124	-.1780	-.1750	-.1348
					-.1715

ALPHA (4) = 8.012 BETA (3) = 4.240 MACH = .59670 Q = 594.93 P = 2387.1
 SECTION 1 !VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

X/CV	.2242	.0375	.0484	.0764	.1658
.000					
.025	-.3879	-.6219	-.4587	-.2569	-.6205
.050	-.3569	-.6378	-.4172	-.3227	-.4983
.150	-.2772	-.3708	-.3558	-.3609	-.3717
.320	-.2789	-.2382	-.1841	-.2643	-.0577
.435	-.3597	.0285	.0780	.0816	-.0707
.555	-.2552	.1131	.1581	.0465	.1060
.775	-.2462	.0011	.0269	-.0614	-.1879
.900		-.1587	-.2350	-.1869	-.2044
					-.2124

ALPHA (4) = 8.009 BETA (5) = 8.293 MACH = .59670 Q = 594.93 P = 2387.1
 SECTION 1 !VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

X/CV	-.1965	-.6415	-.5591	-.5301	-.4440
.000					
.025	-.7054	-.1220	-.7837	-.5527	-.3890
.050	-.7177	-.9794	-.7953	-.5614	-.3777
.150	-.8773	-.1035	-.7967	-.5982	-.3610
.300	-.4139	-.4201	-.7628	-.5473	-.3518
.520	-.4132	-.1162	-.3452	-.3389	-.3342
.655	-.2538	-.0019	-.1748	-.4052	-.2882
.775	-.2938	-.0731	-.0803	-.0448	-.2830
.900		-.2120	-.2664	-.1385	-.2551
					-.2604

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(XEB946)

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TABULATED PRESSURE DATA - OA148 / AMES 11-073-1

ALPHA (5) = 11.917 BETA (4) = 4.245 MACH = .595.28 P = 2336.8 PN/L = 4.8363

SECTION 1 / VERTICAL

A/CY	2.636	.0032	-.0080	-.1380	-.2209
.025	-.3686	-.5509	-.4690	-.3666	-.5406
.050	-.304	-.6397	-.4243	-.3163	-.4551
.150	-.2828	-.3752	-.4066	-.4196	-.3039
.300	-.2893	-.2447	-.1628	-.2109	-.0783
.500	-.3634	.0285	.0750	.0146	.0651
.695	-.2540	-.1033	-.1685	-.0725	-.0765
.775	-.2412	-.0020	-.0327	-.0333	-.2107
.900	-.1699	-.2388	-.1984	-.2189	-.2159
				-.1099	-.2156

ALPHA (5) = 11.904 BETA (5) = 8.309 MACH = .59592 Q = 595.28 P = 2336.8 PN/L = 4.8363

SECTION 1 / VERTICAL

A/CY	2.190	-.7066	-.6566	-.5491	-.4959
.000	-.7688	-1.1127	-.8143	-.5331	-.3747
.025	-.7965	-.9679	-.8256	-.5298	-.3639
.050	-.5423	-.10923	-.8625	-.5762	-.3451
.150	-.5098	-.4394	-.8105	-.5595	-.3306
.200	-.5108	-.1270	-.2988	-.4035	-.3156
.420	-.3880	-.3365	-.0909	-.3524	-.2665
.485	-.3405	-.1081	-.0217	-.2955	-.2808
.600	-.2563	-.2868	-.1487	-.2395	-.2754
				-.2409	-.2754

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TABULATED PRESSURE DATA - OA149 (AMES 11-073-1)

AMES 11-073(OA149) - 140A/B/C/R ORS VERTICAL

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ALPHA (2) = -.007 BETA (3) = .4251 MACH = 1.3999 0 = 600.31 P = 437.59 RNL = 2.9188
 SECTION (1) VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

(XE8W7)

X/CV .000 .6879 .5988 .5602 .2401 .1271
 .025 -.0256 -.1320 -.2792 -.2541 -.0669
 .050 .0428 -.1283 -.0263 -.2423 -.0563
 .150 .1415 -.0263 -.0781 -.2881 -.0294
 .300 .1553 .0474 -.0077 -.0134 -.2310 -.1750
 .520 .0007 -.0359 -.3293 .3295 -.2813
 .786 -.169 .5182 .1554 .4424 .4714 .5646 -.1194
 .775 -.3719 .2373 .4281 .4728 .4473 .5018 -.1882
 .900 .1707 .3348 .4171 .3619 .3354 -.3164

ALPHA (3) = 3.927 BETA (1) = -3.876 MACH = 1.3955 0 = 600.04 P = 440.18 RNL = 2.9202
 SECTION (1) VERTICAL
 Z/BV .1532 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV .000 .6255 .5303 .4970 .6019 .5995
 .025 .3771 .3632 .3062 .3202 .3782
 .050 .1161 .3655 .2079 .3533 .4398
 .150 .2443 .2715 .2483 .4989 .4957
 .300 .2256 .1909 .2155 .5319 .4995
 .520 .0926 .1150 .5255 .6097 .4796
 .786 -.1074 .4422 -.731 .6508 .6286 .5797 -.2278
 .775 -.3765 .3519 .5037 .5594 .5497 .4824 -.3073
 .900 .2956 .385 .4667 .4379 .2777 -.3660

DEPENDENT VARIABLE CP

ALPHA (3) = 3.927 BETA (2) = .191 MACH = 1.3955 0 = 600.04 P = 440.18 RNL = 2.9202
 SECTION (1) VERTICAL
 Z/BV .1550 .3171 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP

X/CV .000 .5698 .5675 .5330 .4442 .2542
 .025 .1536 .1561 .0567 -.2383 -.1014
 .050 .3254 .2527 -.0364 -.2151 -.0905
 .150 .2269 .1643 .1062 .1155 -.1125
 .300 .1709 .0906 .0617 .4388 .4967
 .520 .0199 .0192 .4345 .5578 .4290
 .786 -.4123 .2536 -.1653 .5815 .5752 -.1788
 .775 -.2777 .2624 .4169 .5080 .5212 .4703 -.2857
 .900 .1825 .3479 .4185 .4154 .2650 -.3581

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL							(XEWV47)				
ALPHA (3) =	3.930	BETA (3) =	4.244	MACH =	1.3955	Q =	600.04	P =	440.16	RWL =	2.9202
SECTION 1) VERTICAL											
DEPENDENT VARIABLE CP											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV											
.000	.5873	.5421		.4584		.1892	.0814				
.025	-.1096	-.1569		-.3404		-.4179	-.2311				
.050	-.0187	-.1408		-.3702		-.4115	-.2307				
.150	-.1362	-.0326		-.1435		-.4221	-.2316				
.300	.0997	-.0175		-.0882		-.2032	-.2659				
.520	-.0723	-.0976		.2842		.4247	.0883				
.685	-.3898	.2182	-.1699	.4081	.3949	.4554	.1713				
.775	-.3745	.1587	.3354	.4147	.2855	.3921	.2752				
.900	.0916	.2578	.3533	.3241	.2299	.2299	.3339				
ALPHA (4) =	7.963	BETA (1) =	-3.871	MACH =	1.3954	Q =					
SECTION 1) VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV											
.000	.5992	.4952		.4280		.5055	.5126				
.025	.2554	.2903		.2350		.1800	.2877				
.050	.3942	.3047		.2350		.2551	.3466				
.150	.2870	.2100		.1807		.4519	.4270				
.300	.1533	.1249		.1432		.4743	.4372				
.520	.0403	.0439		.5423		.5459	.4376				
.685	-.4171	.4016	-.1658	.5773	.5671	.5264	-.2418				
.775	-.3765	.3130	.4279	.4951	.4932	.4420	-.3295				
.900	.2447	.3721	.4172	.3857	.2507	.2507	-.3878				
ALPHA (4) =	7.994	BETA (2) =	.174	MACH =	1.3954	Q =					
SECTION 1) VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV											
.000	.6868	.5263		.4440		.3566	.1901				
.025	.1885	.0336		-.0884		-.2609	-.1719				
.050	.3387	.2021		-.0804		-.2493	-.1719				
.150	.2953	.1099		.0552		-.0022	-.1788				
.300	.1132	.0341		-.0020		.3639	.4167				
.520	-.0469	-.0446		.3963		.4759	.3837				
.685	-.4364	.2836	-.1737	.4877	.4867	.5121	-.2062				
.775	-.3764	.2028	.3241	.4237	.4454	.4253	-.3183				
.900	.1291	.2702	.3502	.3542	.2369	.2369	-.3884				

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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$$\alpha_{\text{PHA}} (\psi) = 7.994 \quad \beta_{\text{TA}} (\beta) = 4.239 \quad \text{MACH} = 1.3954 \quad Q = 600.24 \quad P = 440.41 \quad RN/L = 2.9228$$

SECTION (1) VERTICAL

Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.5605	.5686		.3960	.1367	.0466	
.025	-.1329	-.1508		-.3551	-.4470	-.3132	
.050	-.1522	-.12+1		-.3832	-.4479	-.3063	
.075	-.2429	-.3067		-.1671	-.4543	-.3007	
.100	-.3463	-.0285		-.1226	-.1861	-.3101	
.125	-.1189	-.1350		.2468	.3501	.2497	
.150	-.4920	-.1539		-.1726	.3913	.3898	-.2049
.175	-.2734	-.1537		.2378	.3534	.2415	-.3055
.200	-.0293	-.1852		.2642	.2894	.2070	-.3712

$$\alpha_{\text{PHA}} (\psi) = 11.871 \quad \beta_{\text{TA}} (\beta) = -3.858 \quad \text{MACH} = 1.3955 \quad Q = 600.34 \quad P = 440.41 \quad RN/L = 2.9245$$

SECTION (1) VERTICAL

Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6+93	.4579		.3504	.4215	.4043	
.025	.3465	.2619		.1852	.1295	.2405	
.050	.4125	.2702		.1652	.1838	.2976	
.075	.2512	.1540		.1295	.2770	.3749	
.100	.0581	.0585		.0840	.4272	.3838	
.125	-.0331	-.0187		.4791	.4869	.3930	
.150	-.4271	.3555		-.1789	.5072	.4775	-.2479
.175	-.3811	.3991		.3937	.4430	.3965	-.3453
.200	-.0200	.2261		.3322	.3738	.3431	.2266
							-.4153

$$\alpha_{\text{PHA}} (\psi) = 11.873 \quad \beta_{\text{TA}} (\beta) = .176 \quad \text{MACH} = 1.3955 \quad Q = 600.34 \quad P = 440.41 \quad RN/L = 2.9245$$

SECTION (1) VERTICAL

Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.6723	.4913		.3769	.2868	.1450	
.025	.1535	.0367		-.1114	-.2778	-.2390	
.050	.3295	.1719		-.1207	-.2729	-.2258	
.075	.150	.2219		.CC98	-.0339	-.1729	
.100	.3693	-.0116		-.0395	.2841	.3409	
.125	-.0755	-.3849		.3160	.3991	.3282	
.150	-.4561	.2377		-.1872	.4119	.4420	-.2262
.175	-.3551	.1611		.2622	.3819	.3792	-.3374
.200	-.0269	.2030		.2921	.2997	.2102	-.4073

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TABULATED PRESSURE DATA - OAI148 (AMES 11-073-1)

AMES 11-073(OAI148) -140A/B/C/R ORB VERTICAL
ALPHA (5) = 11.868 BETA (3) = 4.257 MACH = 1.3955 Q = 600.34 P = 440.41 RN/L = 2.9245

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(XEBWV7)

SECTION (1) VERTICAL
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250X/CV .000 .6258 .4711 .3176 .0558 -.0055
.025 .1116 -.1549 -.3559 -.4255 -.3370
.050 .1721 -.1377 -.3853 -.4309 -.321
.150 .2243 -.0346 -.1984 -.4323 -.3552
.300 .0465 -.0798 -.1535 -.2360 -.3293
.520 -.1450 -.1689 -.1853 -.2477 -.1064
.685 -.4211 .1110 -.1824 .3188 .2505 .2146
.775 -.3680 .0555 .1720 .2846 .2581 .3371
.900 -.0660 .1384 .2246 .2406 .1918 .4019

ALPHA (6) = 15.839 BETA (1) = -3.834 MACH = 1.3943 Q = 600.32 P = 441.12 RN/L = 2.9229

SECTION (1) VERTICAL
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250X/CV .000 .7658 .5169 .3331 .3667 .2727
.025 -.1991 .1327 .1446 .0848 .0930
.050 -.0444 .2608 .1446 .1311 .1332
.150 .2393 .1121 .0856 .1701 .3469
.300 -.0023 -.0134 .0298 .4007 .3567
.520 -.0971 -.1054 .4437 .4531 .3645
.685 -.4288 .3746 -.2058 .5046 .4535 .2563
.775 -.3683 .3263 .422 .4305 .4205 .3738
.900 -.2417 .3424 .3565 .3216 .2136 .4393

ALPHA (6) = 15.851 BETA (2) = -174 MACH = 1.3943 Q = 600.32 P = 441.12 RN/L = 2.9229

SECTION (1) VERTICAL
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250X/CV .000 .7000 .4995 .3315 .2099 .0810
.025 .0987 -.0242 -.1467 -.3002 -.3123
.050 .2867 .1479 -.1542 -.3056 -.3010
.150 .2766 .0562 -.0267 -.0423 -.1971
.775 .0744 -.0360 -.0773 .2186 .2897
.520 -.1178 -.1232 -.2652 .3462 .2685
.685 -.4554 .2101 -.2027 .3700 .3582 .3863
.775 -.4007 .1439 .2387 .3166 .3332 .3322
.900 .0727 .1681 .2576 .2597 .1818 .4221

(XEBWV7)

(XEBWV7)

(XEBWV7)

SECTION (1) VERTICAL
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250X/CV .000 .7000 .4995 .3315 .2099 .0810
.025 .0987 -.0242 -.1467 -.3002 -.3123
.050 .2867 .1479 -.1542 -.3056 -.3010
.150 .2766 .0562 -.0267 -.0423 -.1971
.775 .0744 -.0360 -.0773 .2186 .2897
.520 -.1178 -.1232 -.2652 .3462 .2685
.685 -.4554 .2101 -.2027 .3700 .3582 .3863
.775 -.4007 .1439 .2387 .3166 .3332 .3322
.900 .0727 .1681 .2576 .2597 .1818 .4221

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TABULATED PRESSURE DATA - DM14B / AMES 11-073-1

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ALPHA (6) =	15.843	BETA (3) =	4.283	MACH =	1.3943	O =	600.32	P =	441.12	RW/L =	2.9229
SECTION 1	VERTICAL	Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250		(XE8V47)
X/CV											DEPENDENT VARIABLE CP
.000	.7619	.5292									
.025	.1182	-.1604									
.050	.2494	-.1197									
.150	.2809	.0014									
.300	.0721	-.0721									
.520	-.1434	-.1862									
.735	-.4603	-.1208	-	.2023	-.2941	.2332	.2285	.1252			
.775	-.3966	-.0520			.1484	.2535	.2429	.3235			
.900		-.0206			.0981	.1886	.2041	.2870	-.2952		
										.1557	-.4310

AMES 11-07310A1481 - 140A/B/C/R ORB VERTICN.

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

REFERENCE DATA
AMES 11-073(DA148) - 190A/B/C/R ORB VERTICAL
(XEBW48) (13 AUG 75)

PARAMETRIC DATA						
RUDDER =	-10.000	SPOILER =	85.000			
BDFLAP =	16.300	L-ELVN =	4.300			
R-ELVN =	4.000	MACH =	1.250			
ALPHA (1) =	-4.024	BETA (1) =	-3.849	MACH =	1.2475	P = 551.11
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP		RNL = 3.0241
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CY	.000	.7670	.6280	.6856	.8044	.7254
	.025	.5922	.4564	.4532	.5477	.4956
	.050	.5997	.4590	.4619	.5751	.5371
	.150	.4809	.3614	.4747	.5730	.5409
	.300	.3278	.2812	.3536	.5817	.5159
	.520	.1604	.2573	.7005	.6394	.4564
	.655	-.4027	.6030	-.1758	.7102	.6816
	.775	-.1725	.4952	.5982	.5999	.4403
	.900		.3994	.4718	.4674	-.3104
ALPHA (1) =	-4.006	BETA (2) =	.189	MACH =	1.2475	P = 551.11
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP		RNL = 3.0241
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CY	.900	.8160	.6906	.7641	.6178	.5223
	.025	.2790	.0356	-.0452	.1182	.2033
	.050	.4398	.2973	.0634	.1277	
	.150	.3779	.2110	.2163	.1764	.2290
	.300	.2219	.1450	.3972	.4960	.3141
	.520	.0610	.440	.6447	.6242	.4434
	.665	-.4487	.5193	-.1752	.6454	.5609
	.775	-.2878	.4154	.5600	.5532	.4351
	.900		.3262	.4317	.4397	.2004 -.4121

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

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$$\text{ALPHA (1)} = -4.015 \quad \text{BETA (3)} = 4.273 \quad \text{MACH} = 1.2475 \quad 0 = 600.37 \quad P = 551.11 \quad RN/L = 3.0241$$

SECTION 1 (VERTICAL)

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
0.00	-7481	-6185		.6005		.2231	.1793
.025	.0729	-.1639		-.3515		-.1491	.0549
.050	.1012	-.1540		-.3834		-.1449	.0686
.150	.1982	.0015		-.1673		-.2178	.0745
.350	.1418	.0279		.0191		-.0829	.0101
.520	-.0240	.0154		.4182		-.4397	
.585	-.4913	.3818	-.1743	.5015	.5227	.4214	-.1322
.775	-.3810	.3121	.4621	.4930	.4637	.5160	-.3524
.900	.2176	.3477	.3477	.3979	.3323	.3926	-.4676

$$\text{ALPHA (2)} = .012 \quad \text{BETA (1)} = -3.869 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad RN/L = 3.0247$$

SECTION 1 (VERTICAL)

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
0.00	6977	5562	5444	5375		.7308	.6535
.025	.5055	.3824		.3372		.4758	.4201
.050	.5252	.3859		.2970		.5111	.4740
.150	.4430	.2859		.4640		.5339	.4881
.350	.2569	.2015		.6421		.5328	.4702
.520	.0887	.1386		.6565	.6279	.5854	.4125
.585	-.4578	.5143	-.1670			.5228	-.3226
.775	-.2802	.4226	.5443	.5461	.5269	.4103	-.3432
.900	.3474	.4304	.4250		.3879	.1784	-.4757

$$\text{ALPHA (2)} = .020 \quad \text{BETA (2)} = .189 \quad \text{MACH} = 1.2460 \quad 0 = 599.92 \quad P = 552.04 \quad RN/L = 3.0247$$

SECTION 1 (VERTICAL)

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
0.00	7574	6203		.6042		.5012	.4050
.025	.2003	.2202		-.0740		.0359	.1341
.050	.3793	.2272		-.0192		.0389	.1481
.150	.3214	.1415		.1424		.0540	.1634
.350	.1605	.0910		.2244		.4813	.2357
.520	-.0328	.0228		.5787		.5730	.4480
.585	-.1986	.1986	-.1639	.6198	.5921	.5116	-.3141
.775	-.3486	.2074	.4977	.5256	.5075	.3959	-.3389
.900	.2513	.3772	.3772	.3986	.3686	.1639	-.4579

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TABULATED PRESSURE DATA - DATA 11-073 (AMES 11-073-1)

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AMES 11-073 (DATA 11-073-1) - 140A/B/C/R ORB VERTICAL						
DEPENDENT VARIABLE CP						
ALPHA (2) = .014	BETA (3) = 4.249	MACH = 1.2460	O = 599.92	P = 552.04	RNL = 3.0247	(XEBV48)
SECTION 1) VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390
X/CV	.000	.6817	.5485	.5446	.1428	.0613
	.025	-.0252	-.2037	-.3788	-.3044	-.0655
	.050	.0103	-.2001	-.4190	-.2956	-.0565
	.150	.1371	-.0750	-.1744	-.3188	-.0383
	.300	.0920	-.0223	-.0458	-.2895	-.1614
	.520	-.0767	-.0965	.3364	.3732	-.4182
	.685	-.5266	.3101	-.4267	.5226	-.1968
	.775	-.4083	.2311	.3925	.7943	-.2733
	.920	.1473	.1473	.2864	.2756	-.4220
ALPHA (3) = 3.961	BETA (1) = -3.873	MACH = 1.2462	O = 600.16	P = 552.05	RNL = 3.0262	
SECTION 1) VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390
X/CV	.000	.6269	.4976	.4466	.6352	.5668
	.025	.3803	.3029	.2539	.3831	.3503
	.050	-.4117	.3135	.2511	.4357	.4074
	.150	.3208	.2184	.1937	.4463	.4315
	.300	.1917	.1303	.2612	.4725	.4207
	.520	.0301	.0549	.5825	.5322	.3720
	.685	-.5224	.4076	.1820	.5681	.4926
	.775	-.3022	.3272	.4822	.4756	.3782
	.920	.2768	.2768	.3812	.3807	.1548
ALPHA (3) = 3.960	BETA (2) = 185	MACH = 1.2462	O = 600.16	P = 552.05	RNL = 3.0262	
SECTION 1) VERTICAL						
Z/BV	.1580	.170	.4590	.6020	.6970	.8390
X/CV	.000	.7094	.5564	.5004	.3876	.2824
	.025	.1635	-.0076	-.1359	-.1659	-.0387
	.050	.3373	.1812	-.1013	-.1638	-.0625
	.150	.2754	.0899	.0566	-.0097	.0623
	.300	.1095	.0186	.0305	.4164	.2744
	.520	-.0530	-.0154	.4959	.5002	.4006
	.685	-.5239	.3127	-.1847	.5287	-.3339
	.775	-.3658	.2214	.4146	.4542	-.3554
	.920	.1704	.1704	.3228	.3515	.3258

DATE 14 FEB 76

TABULATED PRESSURE DATA - DA148 (AMES 11-07310A148)

AMES 11-07310A148) -140A/B/C/R ORB VERTICAL

PAGE 6874

ALPHA (3) = 3.964 BETA (3) = 4.240 MACH = 1.2462 0 = 600.16 P = 552.05 RNL = 3.0262

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.6094	.4934	.4648	.3964	.3964	.0874	.0227
.025	-.0540	-.2199	-.2199	-.2028	-.2028	-.4141	-.1744
.050	.0165	-.2265	-.2265	-.1320	-.1320	-.4105	-.1671
.150	.1092	-.1033	-.1033	-.0670	-.0670	-.4311	-.1442
.300	.0419	-.0670	-.0670	-.0272	-.0272	-.3259	-.3202
.500	-.1534	-.1714	-.1714	.2881	.2881	.4693	-.2145
.650	-.4574	-.2072	-.1825	.3940	.3945	.4603	-.2454
.750	-.4019	-.1370	.3247	.3766	.2435	.3696	-.3280
.800	.3742	.2333	.2333	.2958	.2371	.1707	-.4533

ALPHA (1) = 7.692 BETA (1) = -3.868 MACH = 1.2462 0 = 600.16 P = 552.05 RNL = 3.0273

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.6496	.4534	.3722	.3722	.5381	.4672
.025	.3297	.2332	.1772	.1772	.2877	.2747
.050	-.1923	-.2573	-.1801	-.1801	.3495	.3316
.150	.2693	.1584	.1253	.1253	.3819	.3729
.300	.1135	.0816	.1414	.1414	.4128	.3686
.500	-.0189	-.0092	.5242	.5242	.4737	.3323
.650	-.5215	-.2549	.1974	.5351	.4466	-.3464
.750	-.2625	.2522	.4173	.4390	.3410	-.4090
.800	.2112	.3290	.3290	.3359	.3004	.1274

ALPHA (1) = 6.000 BETA (1) = .178 MACH = 1.2462 0 = 600.16 P = 552.05 RNL = 3.0273

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.6573	.4683	.4119	.4119	.2939	.1331
.025	.1735	-.0403	-.1735	-.1735	-.3458	-.0591
.050	.3201	.1436	-.1549	-.1549	-.3298	-.0435
.150	.2395	.0431	-.0165	-.0165	.0245	-.1340
.300	.0505	-.0360	-.0531	-.0531	.3531	-.3705
.500	-.1116	-.1050	.4102	.4102	.4395	.3190
.650	-.6474	.2517	-.1910	-.4810	.4439	-.3052
.750	-.3856	.1556	.3325	.4036	.3302	-.3893
.800	.0933	.2593	.2593	.3033	.2837	.1445

(XEBV48)

(XEBV48)

DATE 14 FEB 76

TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-07310A14B) - 140A/B/C/R ORB VERTICAL (XEBVNB)							PAGE 6875
SECTION 1 INVERTICAL							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.6364	.4632		.3512		.0273	-.0811
.025	.0794	-.2411		-.4299		.4717	-.2473
.050	.1313	-.2132		-.4691		.4698	-.2407
.100	.1650	-.0802		-.2355		.4479	-.2343
.300	-.0228	-.1218		-.1737		.3459	-.4218
.520	-.1919	-.2167		.2618		.3908	.0431
.695	-.4765	-.1429	-.1910	.3734	.3210	.3935	-.2479
.775	-.4127	.0608	.2528	.3255	.2981	.3082	-.3700
.900		.0050	.1763	.2427	.2257	.1186	-.4836
ALPHA (5) = 11.933	BETA (1) = -3.854	MACH = 1.2450	O = 0	P = 599.95			RNL = 3.0281
SECTION 1 INVERTICAL							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.6675	.4304		.3107		.4366	.4212
.025	.2700	.1875		.1242		.2043	.2094
.050	.3494	.2088		.1242		.2685	.2630
.100	.2165	.1042		.0683		.3332	.3225
.300	.0416	.0002		.0636		.3624	.3211
.520	-.0777	-.0539		.4746		.4224	.2968
.685	-.5294	-.3494	-.2039	.4901	.4550	.3985	-.3508
.775	-.3936	.2471	.3773	.3967	.3752	.3054	-.4284
.900		.1600	.2974	.2989	.2597	.1058	-.5276
ALPHA (5) = 11.941	BETA (2) =	.176 MACH = 1.2450	O = 0	P = 599.95			RNL = 3.0281
SECTION 1 INVERTICAL							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.6580	.4480		.3436		.2171	.0419
.025	.1551	-.0658		-.2018		.3930	-.1814
.050	.2392	.1145		-.1905		.3895	-.1674
.100	.2227	.0064		-.0597		.0547	-.2486
.300	.0213	-.0712		-.1095		.2896	.3095
.520	-.1472	-.1368		.3377		.3861	.2772
.685	-.5537	.2034	-.1965	.4185	.4010	.3990	-.3015
.775	-.4544	.1144	.2695	.3540	-.3509	.2932	-.4058
.900		.0485	.2074	.2574	.2419	.0922	-.4983

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

ALPHA (5) =	11.936	BETA (3) =	4.253	MACH =	1.2450	O =	599.95	P =	552.98	FNL =	3.0281
SECTION (1) VERTICAL	Z/BV	1580	.3170	.4590	.6020	.6970	.8390	.9250	DEPENDENT VARIABLE CP	(XEV48)	
X/CV	.000	.6623	.4300		.2805					- .0341	- .1240
	.025	.0665	-.2468		-.4435					-.4679	- .3511
	.050	.1334	-.2229		-.4752					-.4593	- .3438
	.150	.1643	-.1012		-.2763					-.4778	- .3183
	.300	-.0352	-.1493		-.1991					-.4440	- .4557
	.500	-.2159	-.2466		.2078					.3062	- .1685
	.650	-.5251	.1029	-.2000	.3206	.2531	.3264			.2626	
	.750	-.4176	.0244	.1891	.2727	.2446	.2586			.3877	
	.800	-.3397	.1213	.1909	.1905	.1905	.0781			.4937	

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DATE 14 FEB 76

TABULATED PRESSURE DATA - DATA 14B (AMES 11-072-1)

AMES 11-073(DA14B) - 140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMRP = 1076.6800 IN. XO
 LHEF = .474.8500 IN. "MRP = .0000 IN. YO
 BREF = 936.0600 IN. ZMRP = 375.0900 IN. ZO
 SCALE = .0300

ALPHA (1) = -4.022 BETA (1) = -3.848 MACH = 1.1001 Q = 600.26 P = 708.59 RAVL = 3.1930

SECTION 1 : VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .6892 .5570 .7029 .7466 .6615
 .025 .5278 .3703 .4419 .4280 .3548
 .050 .5195 .3777 .4551 .4749 .4131
 .100 .3937 .2931 .4355 .4714 .4318
 .200 .2252 .2271 .4584 .4801 .4020
 .520 .0726 .3115 .6043 .5269 .3241
 .685 -.5075 .5265 -.2147 .6173 .5849 .4411 -.3882
 .775 -.1297 .4228 .4992 .4948 .4636 .3054 .1609
 .900 .2876 .3534 .3444 .2598 .0597 -.5398

ALPHA (1) = -4.022 BETA (2) = .189 MACH = 1.1001 Q = 600.26 P = 708.59 RAVL = 3.1930

SECTION 1 : VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7473 .6283 .7223 .5507 .4516
 .025 .2506 -.0072 -.1688 .0142 .0784
 .050 .3737 .2111 -.0777 .0213 .0906
 .100 .2839 .1421 .2352 .1150 .1126
 .300 .1320 .1086 .3313 .3799 .2294
 .520 -.0067 .2201 .5516 .5011 .2896
 .695 -.5201 .4755 -.2118 .5828 .4420 .3362
 .775 -.1972 .3502 .4617 .4595 .4352 .2977 .4339
 .900 .2390 .3131 .3126 .2737 .0583 .4377

PAGE 6877

IXE80491 (13 AUG 75)

PARAMETRIC DATA

RUDDER = -10.000 SPDBRK = 85.000
 BDFLAP = 16.300 L-ELVN = 4.000
 R-ELVN = 1.100 MACH =

"ORIGINAL" DATA IS
 OF LOCAL QUALITY

DATE 14 FEB 76

TABULATED PRESSURE DATA - DATA 148 (AMES 11-073-1)

AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

PAGE 6978

ALPHA (1) = -4.029

BETA (3) = 4.271 MACH = 1.1001 Q = 600.26 P = 708.59 RNL = 3.1930

(XEBV49)

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

(XEBV49)

Z/E

.1580

.2170

.4590

.6020

.6970

.8390

.9250

X/C

.6745

.5538

.3196

.0416

.2322

.1327

.0440

.5235

.0203

.3555

.1128

.2187

.1310

.3905

.3347

.53

.2588

.2890

.2286

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.6906

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.1501

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TABULATED PRESSURE DATA - OAI148 (AMES 11-073-1)

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AMES 11-073(OAI148) - 140A/B/C/R ORB VERTICAL

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6255	.4784					
.025	-.0685	-.3502					
.050	-.0359	-.3019					
.100	.0919	-.1231					
.150	-.0183	-.1127					
.200	-.1807	-.1248					
.250	-.5605	.2633					
.300	-.3557	.1990					
.350		.3379					
.400		.2188					
.450		.1325					

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200	-.0621	-.0025					
.250	.5025	.4105					
.300	-.2778	.3144					
.350		.2205					

DEPENDENT VARIABLE CP

SECTION 11 VERTICAL

Z BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X CV							
.000	.6005	.4384					
.025	.7436	.2116					
.050	.3703	.2319					
.100	.2551	-.1227					
.150	.1061	.0451					
.200							

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TABULATED PRESSURE DATA - OA14B (AMES 11-07310A14B) -140A/B/C/R ORG VERTICAL.

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ALPHA (3) = 3.999 BETA (3) = 4.239 MACH = 1.1006 0 = 600.49 P = 708.37 RN/L = 3.1949

SECTION (1) VERTICAL

2/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.5331	.4217	.3936	-.0996	-.0994
.025	-.1085	-.3730	-.5610	-.3947	-.1598
.050	-.3384	-.3343	-.3874	-.3886	-.1465
.100	.0463	-.1744	-.3591	-.4306	-.1345
.200	-.0611	-.1758	-.1789	-.4745	-.3441
.300	-.2592	-.2434	.3047	.3799	-.4975
.400	-.5223	-.1937	-.1836	.3532	.3897
.500	-.5938	.1212	.2947	.3238	-.3488
.600	.6918	.1894	.2098	.1447	.2919
				.0719	-.5902

ALPHA (4) = 7.342 BETA (1) = -3.865 MACH = 1.1006 0 = 600.80 P = 708.61 RN/L = 3.1953

SECTION (1) VERTICAL

2/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.6133	.3631	.3100	.5299	.4619		
.025	-.3337	.1462	.0954	.2944	.2673		
.050	.5575	-.1551	.0987	.3356	.3043		
.100	-.2115	.0505	.0742	.3467	.3114		
.200	-.3223	-.0337	.3104	.3583	.2907		
.300	-.1262	-.0818	.4745	.3985	.2197		
.400	-.6381	.5477	-.1833	.4521	.3607		
.500	-.3315	.2772	.3982	.3112	.3529		
		.2238	.2840	.2586	.2067		

ALPHA (4) = 3.962 BETA (1) = .178 MACH = 1.1006 0 = 600.80 P = 708.61 RN/L = 3.1953

SECTION (1) VERTICAL

2/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.6455	.4338	.3857	.2761	.1608		
.025	.1238	-.1493	-.2651	-.1432	-.0657		
.050	.2596	.0549	-.1972	-.1333	-.0492		
.100	-.5330	-.0489	-.0552	-.1080	-.0299		
.200	-.0339	-.1250	.0730	.2987	.0697		
.300	-.1974	-.1710	.3991	.3737	.2512		
.400	.5886	.2217	-.1741	.4022	.3273		
.500	-.3668	.1487	.3278	.3171	.1996		
		.1412	.2110	.1749	-.0382		

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF = -590.0000 SOFT.
 LREF = 474.8000 IN.
 BREF = 936.0680 IN.
 SCALE = .0300

XMRP = 1.076.6800 IN. X0
 YMRP = .0000 IN. Y0
 ZMRP = 375.0000 IN. Z0

ALPHA (1) = -4.039

BETA (1) = -3.850

MACH = .89970

0 = 599.92

P = 1058.7

RNL = 3.5763

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

X/CV	.000	.025	.050	.150	.300	.520	.695	.775	.920
	.5087	.3773	.3651	.2282	.1798	.0988	.1071	.2351	.2472
	.3971	.2659	.2651	.1798	.1798	.1076	.2356	.4160	.2842
	.6079	.3435	.3504	.3185	.3185	.3188	.4530	.4558	.3432
	.6203	.2871	.3237	.3091	.3091	.3067	.2129	.1171	.2718
	.5266	.1855	.2595	.2618	.2618	.2618	.2129	.1171	.0949
									.3479
									.3630

ALPHA (1) = -4.026

BETA (2) = .188

MACH = .89970

0 = 599.92

P = 1058.7

RNL = 3.5763

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CV

X/CV	.000	.025	.050	.150	.300	.520	.685	.775	.920
	.5796	.5089	.4294	.0409	.0207	.0166	.0116	.0069	.0031
	.5912	.3740	.3700	.1776	.1071	.1837	.3978	.3671	.4117
	.3994	.2052	.2052	.1865	.0329	.2045	.3058	.2317	.2375
	.2969	.1853	.1853	.1804	.0770	.1045	.0833	.3447	.0821
									.3414
									.3669

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(XEBV50) (13 AUG 75)

PARAMETRIC DATA

RUDDER = -.0.000
 BDFLAP = 16.300
 R-ELVN = 4.000
 MACH = .900

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(XEBV50) (13 AUG 75)

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) -140A/B/C/R ORB VERTICAL

ALPHA (2) = .028 BETA (3) = 4.248 MACH = .89853 0 = 599.04 P = 1060.0 RNL = 3.5758

SECTION 1 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4320 .2920 .1531 -.0586 -.1046

.025 -.2679 -.7039 -.6466 -.2510 -.1677

.050 -.1850 -.6366 -.6451 -.2472 -.1552

.150 -.1732 -.3540 -.6763 -.2524 -.1308

.300 -.2629 -.3245 -.5149 -.3317 -.1703

.520 -.4103 -.0381 -.3353 -.4297 -.4407

.685 -.3488 -.2474 -.2272 -.3195 -.3767 -.4112

.775 -.2520 -.1378 -.2158 -.2324 -.2072 -.3060

.795 -.0068 .0428 .0568 .1023 .1237 -.4639

ALPHA (3) = 3.999 BETA (1) = -3.868 MACH = .90073 0 = 600.62 P = 1057.6 RNL = 3.5790

SECTION 1 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X Y .000 .3872 .2542 .4654 .5036 .3993

.025 .2372 .1557 .3226 .2664 .1648

.050 .2275 .1607 .3136 .2836 .2106

.150 .1066 .0886 .2777 .2610 .1971

.300 .0043 .0426 .2779 .2484 .1544

.520 -.1658 .2084 .3919 .2785 .0545

.685 -.2454 .3917 -.1925 .3877 .1797 -.3511

.775 -.2494 -.2748 .3057 .2591 .2078 .0343 -.3544

.900 -.1411 .1246 .0909 .0202 -.1613 -.3847

ALPHA (3) = 4.003 BETA (2) = .184 MACH = .90073 0 = 600.62 P = 1057.6 RNL = 3.5790

SECTION 1 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4994 .3777 .4708 .2805 .1571

.025 -.0847 -.3259 -.3623 -.2071 -.2437

.050 .0703 -.0706 -.1767 -.1673 -.2368

.150 -.0310 -.0313 .0704 -.0218 -.1090

.300 -.1499 -.1117 .1416 .1515 .1005

.520 -.2695 .1264 .3263 .2378 .0172

.685 -.2757 .3323 -.1964 .3416 .1853 -.3612

.775 -.2384 .1957 .2430 .2154 .1737 .0194 -.3822

.900 .0641 .0653 .0367 .0149 -.1838 -.4057

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140AV/B/C/R ORB VERTICAL

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ALPHA (3) =	.4 .005	BETA (3) =	.4 .239	MACH =	.90073	Q =	.600 .62	P =	.1057 .6	RNL =	.3 .5790
SECTION 1 1 VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				(XEBV50)
X/CY											

.000	.3769	.2369		.0629							
.025	-.3024	-.7413		-.6295							
.050	-.2113	-.6978		-.6298							
.150	-.1938	-.4152		-.6170							
.300	-.3226	-.3688		-.5603							
.520	-.4758	.0489		.2956							
.685	-.2951	.2497		-.2041							
.775	-.2717	.1264		.1894							
.900		.0011		.0165							

ALPHA (4) =	.8 .040	BETA (1) =	-.3 .870	MACH =	.89937	Q =	.599 .61	P =	.1059 .0	RNL =	.3 .5771
SECTION 1 1 VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				(XEBV50)
X/CY											

SECTION 1 1 VERTICAL

DEPENDENT VARIABLE CP

Z/BV

X/CY

DATE 14 FEB 76

TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

AMES 11-073(04148) -140A/B/C/R 00B VERTICAL

ALPHA (4) = 8.043 BETA (3) = 4.236 MACH = .89937 0 = 599.61 P = 1059.0 RNL = 3.5771 (XEBV50)

SECTION 1) VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
X/CV .000 .3356 .1884 .0031 -.2170 -.2692
.025 -.2967 -.7374 -.6386 -.2950 -.1969
.050 -.1878 -.6871 -.6521 -.2870 -.1757
.150 -.1600 -.4312 -.6510 -.3063 -.1917
.300 -.3268 -.3799 -.4922 -.4143 -.2597
.520 -.4722 .0209 -.2656 -.4584 -.5765
.685 -.3221 .2233 -.2088 .2707 .2717
.775 -.2744 .1161 .1758 .1672 .1948 .1894
.900 -.0035 .0100 .0036 .0036 .0075 .0058
ALPHA (5) = 11.980 BETA (1) = -3.854 MACH = .89910 0 = 599.28 P = 1059.0 RNL = 3.5742

SECTION 1) VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
X/CV .000 .3615 .1657 .3327 .3904 .2793
.025 -.0028 -.0133 .2749 .2501 .1543
.050 .0468 .0214 .2605 .2487 .1728
.150 -.0378 -.0239 .2357 .2156 .1413
.200 -.1474 -.0457 .2308 .1996 .0965
.520 -.2521 .1676 .3471 .2206 -.0148
.685 -.3040 .3854 -.2190 .3391 .2747 .1401
.775 -.2703 .2656 .2935 .2121 .1573 -.3969
.900 .1650 .1160 .0447 .0230 -.4029
ALPHA (5) = 11.989 BETA (2) = .160 MACH = .89910 0 = 599.28 P = 1059.0 RNL = 3.5742

SECTION 1) VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
X/CV .000 .4551 .1652 .3779 .1808 .0418
.025 -.0545 -.2144 -.3830 .2205 .2666
.050 .0215 -.1944 -.1770 .2077 .2352
.150 -.0635 -.1546 .0267 .0328 .1328
.300 -.1987 -.1545 .0989 .1116 .0434
.520 -.3268 .0719 .2818 .1789 .0480
.685 -.2507 -.2245 .2908 .2367 .3829
.775 -.2115 .1745 .1678 .1249 .0293 .3904
.900 -.2612 .0428 .0028 .0548 .2371 .4306

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

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ALPHA (δ_1) =	11.979	BETA (β) =	4.260	MACH =	.89910	0 =	599.28	P =	1059.0	RNL =	3.5742
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV	.000	.3618	.1559	-.0569							
	.025	-.1390	-.6138	-.7333							
	.050	-.0515	-.5178	-.7413							
	.150	-.1281	-.3712	-.7007							
	.250	-.2870	-.3659	-.2921							
	.350	-.4531	-.0527	-.2123							
	.450	-.571	-.2419	.2250							
	.550	-.3272	.0575	.1217							
	.650	-.0425	-.0429	-.0355							
	7.0										

1XE8V501

1XE8V501

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TABULATED PRESSURE DATA - OA1148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

REFERENCE DATA

SQ.F	2590.000 SQ.FT.	XMRP	=	1076.6800 IN. X0		PARAMETRIC DATA
REF	.474.800 IN.	YMRP	=	.0000 IN. Y0	RUDER =	-0.000 SPDRK = 85.000
BREF	.936.0560 IN.	ZMRP	=	.375.0000 IN. Z0	BOFLAP =	16.300 L-ELVN = 4.000
SCALE	.0300				R-ELVN =	.600 MACH =
ALPHA (1)	= -3.976	BETA (1)	=	-7.854 MACH = .59542	0	
SECTION : VERTICAL				DEPENDENT VARIABLE CP		
Z/B	.1580	.3170	.4590	.6020 .6970 .8390 .9250		
X/CY					P = 2387.9 RNL = 4.8104	
.000	.0702	-.1032		.1257		
.125	.4941	.4571		.5314		
.350	.4434	.3993		.4760		
.150	.2912	.2731		.3741		
.300	.1552	.1729		.3178		
.520	-.1107	-.2439		.3689		
.655	-.2785	-.3519		.3513		
.775	-.2846	-.2776		.2426		
.900		.0124		.0124		
ALPHA (1)	= -3.953	BETA (2)	=	-3.844 MACH = .59542	0	
SECTION : VERTICAL				DEPENDENT VARIABLE CP		
Z/B	.1580	.3170	.4590	.6020 .6970 .8390 .9250		
X/CY					P = 2387.9 RNL = 4.8104	
.000	-.061	.3420		.5054		
.125	.3186	.2454		.2853		
.250	.3526	.2265		.2846		
.375	.1770	.1391		.2393		
.500	.0542	.0568		.2113		
.625	-.1761	-.1751		.3276		
.750	-.2733	-.2936		.1932		
.875	-.2533	-.185		.1938		
900		-.0012		.1626		

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REGULATED PRESSURE DATA - 04148 (AMES 11-073-1)

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ANSI 11-073(00148) - 1400BC/CR 000 VER1.0

NETS 11-0730A1481 - 1400/B/C/D8 VERTICAL INDEXES

SECTION I VERTICAL DEPENDENT VARIABLE CP

Z:BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 5187 .4989 5252 .4938

.025	-.0335	-.3473	-.4505	-.2392	-.5178
.014	-.0114	-.0095	-.0057	-.1867	-.3980
.050	.050	.025	.015	.005	.002
.025	-.025	.015	.005	.002	.001

520 - 2628 - 11070
530 - 2638 - 11070
540 - 2648 - 11070
550 - 2658 - 11070
560 - 2668 - 11070

.385	-.3076	.2477	-.1966	.2726	.2489	.1112	-.3633
.715	-.2828	.2120	.1071	.1181	.0954	-.0074	-.3564

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ALPHA(1) = -3.953 BETA(4) = 4.269 MACH = .59542
ALPHA(2) = -.0625 BETA(1) = 1.2111 MACH = .5848
ALPHA(3) = -.05151 BETA(2) = 1.1423 MACH = .5848
ALPHA(4) = -.05151 BETA(3) = 1.1423 MACH = .5848

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DEPENDENT VARIABLE CP SECTION: I: VERTICAL

Z: BV - 1580 .3170 .4590 .6020 .6970 .8390 .9250

	β_1	β_2	β_3	β_4	β_5
-150	-131.93	-1.003	-1.357	-1.357	-1.033
-150	-261.7	-4.233	-4.449	-4.449	-3.827
-150	-230.1	-354.9	-346.1	-346.1	-333.8
-150	-230.1	-354.9	-346.1	-346.1	-333.8

-300	-1973	-2339	-1751	-4274	-3127
-520	-2373	-0065	0572	-0729	-3381
-595	-2268	-1201	0512	0076	-2016
-650	-2268	-1201	0512	0076	-2016

$\text{ALPHA}_i = -3.985$ $\text{BETA}_i = 8.339$ $\text{MACH} = .59542$

SECTION I: LITERATURAL DEPENDENT VARIABLE CP

-1.20	-.0884	-4.865	- .6148	- .5403	- 4.984
.125	-.5945	-1.1431	-.8640	-.5035	-.4037

- 4882	- 4550
- 4550	- 4218
- 4218	- 3902
- 3902	- 3593
- 3593	- 3291
- 3291	- 2991
- 2991	- 2692
- 2692	- 2393
- 2393	- 2094
- 2094	- 1795
- 1795	- 1496
- 1496	- 1197
- 1197	- 898
- 898	- 5973
- 5973	- 5274
- 5274	- 4555
- 4555	- 3836
- 3836	- 3137
- 3137	- 2438
- 2438	- 1739
- 1739	- 1039
- 1039	- 339
- 339	- 139
- 139	- 1

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TABULATED PRESSURE DATA - DATA 1AMES 11-073-1

$\Delta_P = .21 = .050$ $\text{BETA } (1) = -7.891$ $\text{MACH } = .59620$ $Q = .593.99$ $P = .593.99$ $R/N/L = 4.8200$

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/B	X/CV	Z/B	X/CY	Z/B	X/CV
.000	.0236	-.1697	.0202	-.3340	.2811
.025	.4433	.4112	.5018	.4102	.3403
.050	.3991	.3614	.4499	.3862	.3177
.150	.2530	.2412	.3514	.2962	.2188
.200	.1176	.1439	.2865	.2469	.1400
.500	-.1308	.2326	.3328	.2265	.0025
.685	-.2802	.3354	-.1761	.1289	.3350
.775	-.2677	.2295	.2269	.1449	.0207
.500	-.0428	-.0036	-.0346	-.0712	-.3525
ALPHA (2) = .070	BETA (2) = -3.863	MACH = .6970	Q = .8390	P = .1185	R/N/L = .3508
SECTION 1 : VERTICAL		DEPENDENT VARIABLE CP			
Z/B	X/CV	Z/B	X/CY	Z/B	X/CV
.000	.1580	.2170	.4590	.6020	.6970
.025	.3425	.2750	.4334	.4745	.4137
.050	.2719	.2119	.2648	.2003	.0972
.150	.1319	.2039	.2601	.2152	.1514
.300	.0197	.1054	.2117	.1798	.1250
.500	-.1959	.1633	.1890	.1671	.0736
.685	-.2651	.2340	-.1717	.2832	.1937
.775	-.2766	.1757	.1772	.1354	.0996
.900	-.0040	-.0445	-.0657	-.1016	-.0164
ALPHA (2) = .075	BETA (3) = .185	MACH = .6970	Q = .8390	P = .1016	R/N/L = .3993
SECTION 1 : VERTICAL		DEPENDENT VARIABLE CP			
Z/B	X/CV	Z/B	X/CY	Z/B	X/CV
.000	.4727	.4766	.4440	.2343	.1746
.325	-.6733	-.3560	-.4012	-.2441	-.4942
.050	.0581	.0375	-.1046	-.2049	-.3980
.150	-.0066	-.5695	.0274	-.0382	-.0753
.750	-.0975	-.0785	.0784	.0770	.0080
.825	-.2761	.0329	.2369	.1575	.0517
.855	-.3017	.2731	.2495	.2093	.0879
.775	-.2768	.1164	.1240	.0898	.0364
.750	-.2623	-.0931	-.1100	-.1433	-.3739
ALPHA (2) = .075	BETA (3) = .185	MACH = .6970	Q = .8390	P = .0407	R/N/L = .4070
SECTION 1 : VERTICAL		DEPENDENT VARIABLE CP			
Z/B	X/CV	Z/B	X/CY	Z/B	X/CV

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(XEBV51)

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

ALPHA (3) = 4.035 BETA (5) = 8.279 MACH = .59364 Q = 593.05 P = 2388.1 RNL = 4.0165

SECTION 1 :VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-.1838	-.6356	-.7365	-.5641	-.5120
.025	-.6635	-.1833	-.8571	-.4602	-.3228
.050	-.6927	-.9959	-.8657	-.4666	-.3146
.100	-.8490	-1.0428	-.8879	-.4824	-.3052
.150	-.4099	-.4624	-.9565	-.4871	-.3158
.200	-.4078	-.1378	-.3591	-.5311	-.3759
.250	-.3354	-.0822	-.1810	-.0861	-.3556
.300	-.2953	.0611	.0102	.1248	-.4724
.350	-.1442	-.2035	-.0058	.1995	-.4061
.400					-.3512

ALPHA (4) = 8.061 BETA (11) = -7.886 MACH = .59572 Q = 593.16 P = 2387.8 RNL = 4.8368

SECTION 1 :VERTICAL

Z/BV .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-.6873	-.3456	-.1477	.1782	.1587
.025	.3669	.3391	.4239	.3663	.2921
.050	.3208	.3110	.3866	.3741	.2712
.100	.1886	.1951	.3048	.2564	.1632
.150	.0757	.1070	.2411	.2035	.1169
.200	-.1484	.2102	.2867	.1877	.0029
.250	-.2778	.3230	.1642	.2222	.1266
.300	-.2752	.2239	.1861	.1336	.0122
.350		.0352	-.0478	-.0728	-.0957
.400					-.2801

ALPHA (4) = 3.070 BETA (2) = -3.859 MACH = .59572 Q = 593.16 P = 2387.8 RNL = 4.8368

SECTION 1 :VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	.2908	.1693	.3107	.3528	.2815
.025	.1847	.1544	.2298	.1702	.0859
.050	.1713	.1482	.2220	.1721	.1020
.100	.0639	.0566	.1723	.1342	.0774
.150	-.0415	.0039	.1468	.1226	.0362
.200	-.2222	.1487	.2386	.1392	-.0579
.250	-.2976	.281	-.1599	.2303	.0611
.300	-.3652	.1788	.1486	.0954	-.3253
.350		.0032	-.0685	-.1015	-.3423
.400					-.3797

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(XEP751)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

ALPHA (4) = 8.069 BETA (3) = .180 MACH = .59572 Q = 593.16 P = 2387.8 RNL = 4.8368
 AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL
 (XEB051)

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.165	.3432	.3522	.1420	.1028	
.025	-.1050	-.3631	-.3854	-.2570	-.4385		
.050	-.0882	-.0829	-.1022	-.2502	-.2770		
.150	-.0599	-.1016	-.0059	-.0343	-.0620		
.300	-.1455	-.1087	.0397	.0319	-.0245		
.520	-.2935	-.0829	.1917	.0993	-.0927		
.685	-.2854	.2238	-.1605	.1432	.0570	-.3684	
.775	-.2498	-.1074	-.0938	.0470	-.0174	-.0784	-.3877
.900	-.0624	-.1208	-.1521	-.1847	-.2040	-.4021	

ALPHA (4) = 8.069 BETA (4) = 4.237 MACH = .59572 Q = 593.16 P = 2387.8 RNL = 4.8368
 SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.2295	.0169	-.1389	-.3142	-.3130	
.025	-.3891	-.6669	-.5936	-.4088	-.2983		
.050	-.3450	-.5059	-.5847	-.4062	-.2719		
.150	-.2798	-.4364	-.5838	-.4125	-.2644		
.300	-.2670	-.2402	-.2413	-.4539	-.3033		
.520	-.3594	-.0038	-.1673	-.1328	-.1884	-.4279	
.65	-.2758	-.1539	-.1673	.1496	.0673	-.0398	-.3698
.75	-.2556	-.0520	.0273	.0254	.0027	.0165	-.3665
.900	-.1228	-.1228	-.1647	-.1723	-.1718	-.0706	-.3746

ALPHA (4) = 8.063 BETA (5) = 8.284 MACH = .59572 Q = 593.16 P = 2387.8 RNL = 4.8368
 SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	-.2274	-.7020	-.7747	-.5945	-.5256	
.025	-.7167	-.1434	-.8255	-.4544	-.3138		
.050	-.7259	-.1010	-.8350	-.4504	-.3072		
.150	-.8877	-.1061	-.8598	-.4873	-.3072		
.300	-.4062	-.4118	-.9533	-.4936	-.3048		
.520	-.4050	-.1649	-.3408	-.5468	-.3671		
.685	-.2947	.0583	-.1875	-.0639	-.5189	-.4709	-.3412
.775	-.2971	-.0121	-.0152	.0970	-.2812	-.4673	-.3354
.900	-.1599	-.2134	-.0261	-.1180	-.2834	-.3371	

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TABULATED PRESSURE DATA - OAI48 1 AMES 11-073-1

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ALPHA (5) = 12.002 BETA (1) = -7.847 MACH = .59250 0 = 592.81 P = 2388.1 RNL = 4.8267

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/BV	X/CV	BETA (1)	MACH	P	RNL
.1580	.3170	.4590	.6020	.6970	.8390
.900	X	.0909	-.4441	-.1898	.0819
.025	.2898	.3213	.3999	.3210	.2566
.050	.2383	.2812	.3627	.3080	.2361
.150	.1106	.1717	.2825	.2309	.1521
.300	.0209	.1083	.2271	.1822	.0848
.520	-.1582	.2215	.2654	.1576	.0320
.685	-.2577	.3462	.2444	.1971	.1140
.775	-.2745	.2459	.1858	.1068	.2765
.900	.0620	.0419	-.0807	-.1048	-.2883

ALPHA (5) = 12.023 BETA (2) = -3.840 MACH = .59550 0 = 592.81 P = 2388.1 RNL = 4.8267

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/BV	X/CV	BETA (1)	MACH	P	RNL
.1580	.3170	.4590	.6020	.6970	.8390
.900	X	.2910	.1313	.2604	.3005
.025	.1645	.1460	.2284	.1686	.2279
.050	.1664	.1301	.2076	.1587	.0798
.150	.0379	.0448	.1667	.1223	.0947
.300	-.0606	.0045	.1405	.1084	.0598
.520	-.2418	.1493	.2242	.1230	.0175
.685	-.2876	.2890	.2088	.1623	.0788
.775	-.2615	.1916	.1442	.0755	.0542
.900	.0220	.0662	-.0662	-.1075	-.3409

ALPHA (5) = 12.027 BETA (3) = .177 MACH = .59550 0 = 592.81 P = 2388.1 RNL = 4.8267

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/BV	X/CV	BETA (1)	MACH	P	RNL
.1580	.3170	.4590	.6020	.6970	.8390
.900	X	.3941	.3124	.3085	.0986
.025	-.1003	-.3670	-.3780	-.2654	.0417
.050	-.0019	-.0946	-.0878	-.2739	.4147
.150	-.0736	-.1133	-.0051	-.0306	.2589
.300	-.1508	-.1121	.0317	-.0225	.0573
.520	-.2960	.0779	.1713	.0837	.0387
.685	-.2804	.2186	.1682	.1189	.1116
.775	-.2436	.1142	.0850	.0254	.3595
.900	.0547	-.0547	-.1339	-.1718	-.3843

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/D ORG VERTICAL
 ALPHA (5) = 12.024 BETA (4) = 4.250 MACH = .59559 Q = 592.81 P = 2388.1 RNL = 4.8267
 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CV	BETA (5)	MACH	Q	P	RNL
.000	.2581	- .0199	.2056	.3467	.3486	
.025	.3706	- .6894	.6224	.3961	.2703	
.050	.3379	- .5278	.6186	.3935	.2557	
.150	.2775	- .4288	.6337	.4015	.2576	
.300	.2824	- .2909	.2118	.4381	.2911	
.520	.3591	- .0035	.1254	.2392	.4453	
.685	.2618	.1533	.1732	.1079	.0464	
.775	.2520	.0530	.0203	.0299	.0170	
.900	.1148	.-1963	.-1931	.-1662	.-0543	
					.-3184	
						RNL = 4.8267

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(XEBV51)

ALPHA (5) = 12.010 BETA (5) = 8.307 MACH = .59550 Q = 592.81 P = 2388.1 RNL = 4.8267
 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CV	BETA (5)	MACH	Q	P	RNL
.000	.2230	- .7392	.6559	.6099	.5717	
.025	.8006	- 1.1004	.8374	.4656	.3385	
.050	.8099	- .9397	.8503	.4764	.3205	
.150	.5439	- 1.0854	.8873	.5083	.3247	
.300	.4949	- .4765	- 1.0063	.5340	.32892	
.520	.4890	- 1.1479	- .2464	.5583	.4048	
.685	.3688	.0310	- .1787	.4710	.5050	
.775	.3366	- .0277	- .0393	.2329	.3659	
.900	.1891	- .1891	- .2278	- .0578	- .0797	
						RNL = 4.8267

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STABILIZED PRESSURE DATA - 04148 (AMES 11-073-1)

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ANES 111-073(0A148) - 140A/B/C/R ORB VERTICAL

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL
ALPHA (1) = -4.048 BETA (3) = 4.268 MACH = 1.3963 0 = 600.46 P = 439.94 RNL = 2.9139

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.7686	.6684	.6156	.4827	.3382
.025	.0932	-.0707	-.2579	-.5020	-.5670	
.050	.1171	-.0775	-.2959	-.5095	-.5467	
.150	.2148	.0340	-.0566	-.4021	-.4541	
.300	.2127	.0847	-.0186	.0298	-.2151	
.520	.0500	.0148	.1032	.2061	.1233	
.685	-.3741	-.0411	-.1547	.1334	.2301	-.2243
.775	-.3863	-.0770	.0340	.1167	.1034	.1476
.900	-.1413	-.0201	.0558	.0728	.0198	.2491

ALPHA (2) = -0.027 BETA (1) = -3.878 MACH = 1.3971 0 = 600.78 P = 439.70 RNL = 2.9154

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.7185	.5923	.5728	.6037	.5993
.025	.5240	.4476	.3957	.4030	.3510	
.050	.5460	.4476	.3905	.3981	.3849	
.150	.4492	.3456	.3242	.3409	.3191	
.300	.3135	.2621	.2647	.3400	.3121	
.520	.1544	.1691	.3046	.3964	.2284	
.685	-.3549	.0541	-.4880	.3017	.3754	-.1706
.775	-.3632	.0281	.1250	.2153	.2552	-.1392
.900	-.0280	.0833	.1624	.2014	.1008	-.2050

ALPHA (2) = -.013 BETA (2) = .172 MACH = 1.3971 0 = 600.78 P = 439.70 RNL = 2.9154

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.7825	.6708	.5268	.6217	.5037
.025	.2105	.1040	-.0096	-.0481	-.1540	
.050	.3980	.2953	.0229	.0114	.1240	
.150	.3742	.2121	.1713	.1918	.1783	
.300	.2317	.1500	.1429	.1786	.1974	
.520	.0747	.0636	.2154	.3357	.1733	
.685	-.3764	-.0080	-.1497	.1847	.2126	.3140
.775	-.3953	-.0474	.0504	.1259	.1982	.2000
.900	-.1152	-.0021	.0839	.1153	.0460	.1603

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(XEB92)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL
 $\alpha = -0.015$ $\beta = 1.3$ $M = 4.247$ $H = 1.3971$ $O = 600.78$ $P = 439.70$ $R/V/L = 2.9154$

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(1E8P22)

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6940	.5982	.5376	.4256	.2707	
.025	-.0232	-.1316	-.2916	-.4981	-.5573		
.050	.0412	-.1497	-.3312	-.5097	-.5442		
.150	.1497	-.0249	-.1061	-.3956	-.4608		
.300	.5444	.0484	-.0650	-.0122	-.1659		
.520	-.0009	-.0375	.0526	.1623	.0736		
.685	-.4091	-.0934	-.1526	.0837	.1937	.2539	
.775	-.3978	-.1226	-.0313	.0387	.160	.2317	
.900	-.1868	-.0733	.0116	.0248	-.0106	-.2692	
$\alpha = 3.910$ $\beta = 1.1$ $M = 3.886$ $H = 1.3964$ $O = 600.16$ $P = 439.71$ $R/V/L = 2.9032$							
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6244	.5301	.5004	.4902	.5034	
.025	-.3827	.3696	.3147	.3270	.2832		
.050	-.2229	-.3744	.3140	.3223	.3161		
.150	.3487	.2756	.2541	.2683	.2702		
.300	-.2408	.1956	.1952	.2558	.2469		
.520	.3367	.1057	.2394	.3483	.1721		
.685	-.2345	.0124	-.1578	.2174	.2283	.2934	
.775	-.3751	-.0179	-.0789	.1566	.1831	.2015	
.900	-.0749	.0365	.1117	.1398	.0710	.1766	
$\alpha = 3.912$ $\beta = 1.21$ $M = 1.74$ $H = 1.3964$ $O = 600.16$ $P = 439.71$ $R/V/L = 2.9032$							
Z/BV	.1520	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6296	.5991	.5357	.4946	.3996	
.025	.1599	.0712	-.0409	-.0544	-.1659		
.050	-.2316	.2614	-.0253	-.0459	-.1354		
.150	.5283	.1662	.1155	.1280	.1284		
.300	-.1737	.0913	.0862	.1176	.1255		
.520	.0232	.0076	.1476	.2621	.1166		
.685	-.3984	-.0484	-.1510	.1190	.1433	.2352	
.775	-.3749	-.0860	.0041	.0675	.0987	.1428	
.900	-.1533	-.0484	.0274	.0576	.0094	-.2626	

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

AMES 11-073(04148) -140A/B/C/R ORB VERTICAL
SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .5918 .5398 .4563 .3674 .2192
.025 -.0962 -.1566 -.3445 -.4959 -.5480
.050 -.0077 -.1407 -.3671 -.5058 -.5433
.150 -.1449 -.0329 -.1440 -.3688 -.4628
.300 -.1039 -.0098 -.0905 -.3688 -.4628
.520 -.0714 -.0914 -.0002 -.0582 -.1166
.685 -.3717 -.1445 -.1575 -.0187 .0319 -.2857
.775 -.3781 -.1731 -.0856 -.0165 .0036 .0699
.900 -.2288 -.1293 -.0488 -.0294 -.0474 -.2970

ALPHA (4) = 7.922 BETA (1) = -3.876 MACH = 1.3965 Q = 599.65 P = 439.24 RNL = 2.9107

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
X/CV .000 .5973 .4895 .4267 .3834 .4140
.025 .2772 .3016 .2493 .2608 .2330
.050 .3895 .3136 .2485 .2516 .2514
.150 .2885 .2178 .1908 .1998 .2042
.300 .1574 .1309 .1411 .1858 .1879
.520 .0419 .0473 .1733 .2433 .1215
.685 -.4076 -.0168 -.1747 .1683 .2299
.775 -.4076 -.0478 .0066 .1065 .1302 .1584
.900 -.1115 -.0032 .0677 .0831 .0393 -.2761

ALPHA (4) = 7.930 BETA (2) = -169 MACH = 1.3965 Q = 599.65 P = 439.24 RNL = 2.9107

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
X/CV .000 .6867 .5242 .4442 .3864 .3673
.025 .1923 .0426 -.0649 -.0789 -.1804
.050 .3582 .2152 -.0611 -.0611 -.1522
.150 .2978 .1129 .0615 .0613 .0670
.300 .1169 .0390 .0256 .0544 .0646
.520 -.0381 -.0467 .0840 .1920 .0616
.685 -.4236 -.0887 -.1615 .0599 .0760 .1598
.775 -.3836 -.1229 -.0406 .0135 .0393 .0916
.900 -.1908 -.0896 -.0232 -.0012 -.0240 -.2943ORIGINAL PAGE IS
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TABULATED PRESSURE DATA - OA1481 (AMES 11-073-1)

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ALPHA (4) = 7.931 BETA (3) = 4.235 MACH = 1.3965 Q = 599.65 P = 439.24 RNL = 2.9107

SECTION 1 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
0.00	.5670	.5052		.3847		.3063	.1779
.025	.1074	.1485		.3557		.4790	-.5395
.050	.1487	.1263		.3784		.4894	-.5395
.150	.2457	.0673		.1653		.3040	-.4345
.300	.0452	.0573		.1013		.0946	-.1051
.500	.1147	.1493		.0427		.0448	-.0301
.665	.3967	.1915		.1601		.0600	-.3008
.715	.2779	.2253		.1279		.0649	-.2963
.750	.2581	.1692		.1692		.0594	-.3202

ALPHA (5) = 11.858 BETA (1) = -3.866 MACH = 1.3951 Q = 600.34 P = 440.65 RNL = 2.9166

SECTION 1 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
0.00	.6182	.4524		.3569		.3014	.3346
.225	.3554	.2722		.1981		.1976	.1790
.350	.1561	.2752		.1969		.1901	.1941
.450	.2620	.1693		.1353		.1410	.1432
.500	.5862	.0657		.0849		.1231	.1366
.665	.0401	.128		.1643		.1773	.0826
.715	.3294	.0353		.0207		.1311	.1732
.750	.4034	.1346		.0272		.0906	.1222
.785	.3967	.1346		.0398		.0450	.0208
.800	.2581	.1346		.167		.13951	0

ALPHA (5) = 11.857 BETA (2) =

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
1.00	.6726	.4794		.3796		.3103	.3616
.725	.1669	.3229		.0867		.0951	-.1653
.850	.3349	.1826		.0867		.1141	-.1522
.950	.2931	.0829		.0175		.0140	.0168
.950	.0916	.0032		-.0151		-.0019	.0157
.920	.0713	-.0831		.0345		.1305	.0165
.775	.4758	-.1241		.1675		.0275	-.2864
.775	.3946	-.1543		.0798		.0070	.0424
.750	.2148	-.1233		-.0602		-.0472	-.0516

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

ALPHA 1 51 = 11.865 BETA 1 3) = 4.248 MACH = 1.3951 Q = 600.34 P = 440.65 RN/L = 2.9166

SECTION 11 VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CV	.000	.6343	.4745	.3172	.2441	.1369
	.025	.1212	-.1493	-.3515	-.4683	-.5344	
	.050	.1839	-.1377	-.3789	-.4724	-.5438	
	.150	.2253	-.0293	-.1949	-.2928	-.3948	
	.300	.0192	-.0766	-.1289	-.1336	-.1739	
	.520	-.1429	-.1653	-.0719	-.0083	-.0525	
	.695	-.1444	-.2117	-.1779	-.0665	-.0029	
	.775	-.3846	-.2372	-.1583	-.0835	-.3246	
	.500	-.2893	-.1997	-.1358	-.1209	-.3204	
					-.1128	-.3485	

ALPHA 1 61 = 15.826 BETA 1 1) = -3.845 MACH = 1.3947 Q = 600.64 P = 441.12 RN/L = 2.9102

SECTION 11 VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CV	.000	.7654	.5122	.3308	.2455	.2710
	.025	-.2035	.1406	.1588	.1543	.1372	
	.050	-.0448	.2663	.1562	.1472	.1474	
	.150	.2336	.1167	.0943	.0986	.0948	
	.300	-.0561	-.0094	.0411	.0723	.0792	
	.520	-.0975	-.0968	.0662	.1347	.0537	
	.685	-.4120	-.0685	-.1838	.0896	.1391	-.2644
	.775	-.3905	-.0789	-.0134	.0641	.0728	-.0956
	.300	-.1360	-.0226	.0253	.0220	.0074	-.2514
					-.3114		

ALPHA 1 61 = 15.841 BETA 1 2) = -1.65 MACH = 1.3947 Q = 600.64 P = 441.12 RN/L = 2.9102

SECTION 11 VERTICAL DEPENDENT VARIABLE CP

Z/BV	X/CV	.000	.7027	.4981	.3319	.2432	.3208
	.025	.0827	-.0129	-.1262	-.1380	-.2019	
	.050	.2949	.1565	-.1293	-.1425	-.1547	
	.150	.2762	-.0581	-.0184	-.0255	-.0163	
	.300	.0758	-.0337	-.0448	-.0441	-.0246	
	.520	-.1132	-.1179	-.0097	-.0231	-.0274	
	.685	-.3889	-.1479	-.1840	-.0491	-.0401	-.3112
	.775	-.3341	-.1753	-.1005	-.0403	-.0087	-.2997
	.300	-.2329	-.1397	-.0861	-.0818	-.0762	-.3461

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

PAGE 690a

ALPHA = 15.833 BETA = 31° MACH = 1.3947 0 = 600.64 P = 441.12 R/L = 2.9102
SEC 100: 1 VERTICAL

(XEBV52)

(XEBV52)

X/CP	Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
.000	.7626	.5392		.2889		.1788		.0994
.025	.1261	-.1557		-.3576		-.4639		.5329
.050	.2565	-.1143		-.3880		-.4698		.5450
.075	.6335	-.0664		-.2056		-.2642		.3914
.100	.0754	-.3777		-.1447		-.1636		.2175
.125	-.1413	-.1722		-.0598		-.0284		.0825
.150	-.4496	-.2103		-.1028		-.0390		.3378
.175	-.4055	-.2370		-.1147		-.0544		.3378
.200	-.29332	-.2092		-.1506		-.1416		.3713

DATE 14 FEB 76

TABULATED PRESSURE DATA - 09148 | ANES 11-073-1 |

PRESSURE DATA - 09148 | MFG 11-077-11

ANSWERING THE CALL TO LEADERSHIP

卷之三

EXERCISES

REFERENCE DATA

	ITEM	DESCRIPTION	QUANTITY	UNIT	PRICE	AMOUNT
R-REF	L-E90	0.000 SO. FT.	1	X-MRP	= 1076.6800	IN. X0
L-BEF	474	.8000 IN.	1	Y-MRP	= .0000	IN. Y0
B-BEF	936	.0680 IN.	1	Z-MRP	= 375.0000	IN. Z0
S-CLE	0300		1			
RUDER	-		-10	000	SPDRK	= 55.000
BUFLAP	-		16	300	L-ELVN	= -4.000
R-ELVN	-		4	000	MACH	= 1.250

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DEPENDENT VARIABLE CP

88-22568 - 3170 - 1580 - 6954 - 6020 - 6970 - 6888 -

x/св

250 564 24328
383 4050 11267

• 3590 . 3525 . 3525 . 3525 . 3525 . 3525 . 3525 .

1951-1952
1952-1953

¹ 1963-64
2 1964-65
3 1965-66
4 1966-67
5 1967-68
6 1968-69
7 1969-70
8 1970-71
9 1971-72
10 1972-73
11 1973-74
12 1974-75
13 1975-76

THEORY OF THE POLYMERIZATION OF VINYLIC MONOMERS 1001

1.0000000000000000E+0000 = 1.0000000000000000E+0000

DEPENDENT VARIABLE CP

30 31

5369 : 6485

卷之三

- 1088 -

1520 0.920 0.920 0.920 0.920 0.920

2028 2029 2030 2031 2032 2033 2034 2035 2036 2037 2038 2039 2040

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DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6906

α_{ref} = 1.0 = -4.533 β_{ref} = 31 = 4.271 MACH = 1.2435 0 = 597.22 P = 551.79 RNL = 3.0058

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

(XEBV53)

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

(XEBV53)

X/CP	7287	.5939	.5598	.3628	.2404
C25	.0367	-1.1787	-1.3640	-1.5867	-1.5690
C50	.1553	-1.1763	-1.4051	-1.6375	-1.5574
C75	.1582	-1.2225	-1.268	-1.3405	-1.5389
C100	.1246	-1.0057	-1.0915	-1.1482	-1.3091
C125	.1532	-1.1236	-1.0103	.0226	-0.473
C150	.1473	-1.1212	-1.2150	.0259	-1.3539
C175	.1474	-1.1212	-1.0482	.0083	-1.3081
C200	.1237	-1.0538	-1.1105	-.0277	-1.3370

ALPHA = 0 = 0.0 β_{ref} = 31 β_{ref} = 1.0 = -3.881 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0118

SECTION 2: VERTICAL

DEPENDENT VARIABLE CP

(XEBV53)

X/CP	7287	.3170	.4590	.6020	.6970	.8390	.9250
C25	.8570	-1.773	-1.4914	.5622	.54444		
C50	.7765	-1.732	-1.3114	.3182	.2706		
C75	.1914	.5693	-1.3050	.3234	.3058		
C100	.5806	.2654	-1.2373	.2663	.2803		
C125	.2293	.1760	-1.1724	.2630	.2398		
C150	.0571	.1572	-2.1220	.2852	.1261		
C175	.1635	.1635	-2.0005	.3207	.2952		
C200	.1246	.0513	-1.3456	.1589	.1491		
C225	.1246	.0715	-1.0062	.0846	.1139	-.3143	

ALPHA = 0 = 0.0 β_{ref} = 31 β_{ref} = 2.0 = .178 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0118

SECTION 3: VERTICAL

DEPENDENT VARIABLE CP

(XEBV53)

X/CP	7287	.1717	.4590	.5920	.6970	.8390	.9250
C25	.7214	.5235	.5500	.5620	.4459		
C50	.1215	.1215	-.1257	-.1805	-.3283		
C75	.1674	.1674	-.1653	-.0681	-.2632		
C100	.1674	.1674	-.1773	.1023	.0716		
C125	.1674	.1674	-.1442	.1023	.1279		
C150	.1674	.1674	-.1259	.2642	.0617		
C175	.1674	.1674	-.2105	.1123	.2391		
C200	.1674	.1674	-.0479	.0695	.0921		
C225	.1674	.1674	-.0951	-.0221	-.0730	-.3493	

DATE 1: FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6907

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

(XE8953)

ALPHA (12) = .000 BETA (3) = 4.247 MACH = 1.2454 O = 599.32 P = 552.04 RNL = 3.0119

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY	.6556	.5166		.4655		.3227	.1612
.025	-.0612	-.2261		-.4022		-.6452	-.6310
.050	-.0225	-.2264		-.4448		-.6741	-.6269
.150	-.0379	-.1148		-.2063		-.4313	-.6104
.300	-.0593	-.0529		-.1528		-.1599	-.2442
.600	-.1020	-.1293		-.0282		-.0622	-.0614
.800	-.5357	-.1933		-.2067	-.0155	-.0017	-.3910
.775	-.4743	-.2223		-.1117	-.0524	-.0403	-.3581
.500	-.1007	-.1645		-.0969	-.0803	-.1301	-.4112

ALPHA (3) = 3.544 BETA (1) = -3.877 MACH = 1.2467 O = 599.84 P = 551.34 RNL = 3.0121

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY	.6283	.4904		.4425		.4874	.4758
.025	.3880	.3078		.2561		.2722	.2184
.050	-.4204	-.3156		.2505		.2727	.2579
.150	.3265	.2195		.1690		.2199	.2333
.300	.1921	.1346		.1348		.2211	.1924
.600	.0307	.0312		.1623		.2847	.0939
.750	-.5043	-.0769		-.1673	-.1715	.1833	-.3136
.750	-.3512	-.1027		-.0119	-.0910	.1152	.1224
.500	-.1550	-.0373		.0452	.0750	-.0423	-.2855

ALPHA (3) = 3.945 BETA (2) = .180 MACH = 1.2467 O = 599.84 P = 551.34 RNL = 3.0121

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY	.7115	.5551		.4983		.4992	.3821
.025	-.1633	-.1023		-.1207		-.1850	-.3292
.050	.3429	.1913		-.0891		-.1056	-.2781
.150	.2801	.0355		.0425		.0687	.0566
.300	.1119	.0213		.0141		.0682	.0344
.600	-.0507	-.0583		.0987		.2250	.0332
.750	-.0545	-.1652		-.1696	-.0928	.0332	-.3440
.750	-.0553	-.1513		-.0785	-.0134	.0332	-.3135
.500	-.2443	-.1277		-.1277	-.0041	-.0960	-.3587

DATE 14 FEB 76

TABULATED PRESSURE DATA - OAI4B 1 AMES 11-073-1

PAGE 6508

AMES 11-0731(OAI4B) -140AV/B/C/P ORB VERTICAL

ALPHA (3) = 3.949 BETA (3) = 4.232 MACH = 1.2467 O = 599.64 P = 551.34 RN/L = 3.0121

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/8V	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6105	.4958	-.4161	-.2826	.1161	
	.025	-.0656	-.2367	-.4158	-.6300	-.6109	
	.050	.0238	.2168	-.4570	-.6618	-.6012	
	.100	-.1140	-.0953	-.2283	-.3886	-.5797	
	.150	.0420	-.0650	-.1509	-.1781	-.3160	
	.200	-.1486	-.1653	-.0370	-.0681	-.0074	
	.250	-.4297	-.2353	-.1650	-.0276	.1131	
	.300	-.4046	-.2611	-.1560	-.0702	-.0172	
	.350	-.2929	-.1979	-.1161	-.0962	-.1411	

ALPHA (4) = 7.975 BETA (4) = -3.876 MACH = 1.2465 O = 599.91 P = 551.57 RN/L = 3.0143

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/8V	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6428	.4522	.3712	.3776	.3847	
	.025	.3354	.2430	.1876	.2106	.1744	
	.050	.3845	.2607	.1898	.2061	.2004	
	.100	.2704	.1640	.1304	.1543	.1692	
	.150	.1191	.0654	.0811	.1553	.1330	
	.200	-.0145	-.0173	.1297	.2375	.0468	
	.250	-.5057	-.1078	-.1773	.1163	.1778	
	.300	-.4293	-.1400	-.0350	.0371	.0626	
	.350	-.9000	-.2024	-.0830	-.0087	.0206	

ALPHA (4) = 7.918 BETA (4) = -1.69 MACH = 1.2465 O = 599.91 P = 551.57 RN/L = 3.0143

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/8V	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6904	.4872	-.4157	-.4063	.2786	
	.025	.1360	-.5246	-.1433	-.1873	-.3170	
	.050	.3324	.1537	-.1197	-.1667	-.2830	
	.100	.2458	.0472	-.0078	.0130	.0130	
	.150	.5543	-.0397	-.0382	.0092	.0427	
	.200	-.1063	-.1143	.0415	.1567	-.0083	
	.250	-.5252	-.1742	-.1715	.0076	.1284	
	.300	-.7755	-.2173	-.1198	-.0470	-.0247	
	.350	-.9000	-.2761	-.1664	-.0325	-.1216	

DATE 14 FEB 76

TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-07310A14B1 -140A/B/C/R ORB VERTICAL

(XE9V53)

ALPHA (4) = 7.882 BETA (3) = 4.233 MACH = 1.2465 0 = 599.91 P = 551.57 RNL = 3.0143

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	X/CV	BETAS	MACH	P	RNL
.000	.6375	.4647	.3438	.2187	.0575
.025	.0841	-.2364	-.4372	-.6202	-.5989
.050	.1327	-.2123	-.4809	-.6277	-.5934
.150	.1700	-.0774	-.2602	-.4188	-.5783
.300	-.0219	-.1169	-.1689	-.2069	-.3698
.520	-.1901	-.2111	-.0808	.0285	-.0667
.685	-.4533	-.2702	-.1707	-.0737	-.3958
.775	-.4275	-.3004	-.2018	-.1120	-.0973
.900	-.3146	-.2417	-.1540	-.1363	-.1742

ALPHA (5) = 11.916 BETA (1) = -3.857 MACH = 1.2482 0 = 600.48 P = 550.64 RNL = 3.0151

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	X/CV	BETAS	MACH	P	RNL
.000	.6695	.4309	.3099	.2867	.3096
.025	.2856	.2020	.1394	.1595	.1294
.050	.3556	.2207	.1377	.1528	.1526
.150	.2218	.1143	.0805	.1074	.1197
.300	.0462	.0124	.0339	.1133	.0942
.520	-.0692	-.0583	.1013	.2034	.0143
.685	-.5040	-.1077	-.1810	.0743	.1303
.775	-.4277	-.1420	-.0453	.0852	.3487
.900	-.2101	-.0921	-.0253	.0395	.3461

ALPHA (5) = 11.930 BETA (2) = .181 MACH = 1.2482 0 = 600.48 P = 550.64 RNL = 3.0151

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV	X/CV	BETAS	MACH	P	RNL
.000	.6724	.4473	.3449	.3213	.2345
.025	.1664	-.0545	-.1815	-.2050	-.3317
.050	.3078	.1219	-.1647	-.2081	-.2916
.150	.2301	.0134	-.0499	-.0384	-.0331
.300	.0264	-.0648	-.0820	-.0431	-.0138
.520	-.1424	-.1495	-.0089	.1030	-.0470
.685	-.5284	-.2070	-.1752	-.0389	-.3926
.775	-.4199	-.2367	-.1500	-.0886	-.0568
.900	-.2978	-.1932	-.1199	-.0938	-.1403

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DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

(XEBV53)

ALPHA (+ 5) = 11.925 BETA (- 3) = 4.245 MACH = 1.2482 0 = 600.48 P = 550.64 RNL = 3.0151

SECTION (+) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.6660	.4330	.2794	.1540	.0105
.025	.0663	-.2354	-.4416	-.6106	-.6111	
.050	.1357	-.2191	-.4802	-.6016	-.6019	
.150	.1690	-.0955	-.2804	-.3537	-.5948	
.300	-.0313	-.1465	-.1915	-.2318	-.3522	
.520	-.2128	-.2383	-.1264	-.0293	-.0987	
.685	-.4744	-.2925	-.1821	-.1109	-.0482	-.4052
.775	-.4320	-.3164	-.2293	-.1498	-.1406	-.0943
.900	-.3421	-.2719	-.2719	-.1896	-.1762	-.1975
						-.4517

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(XEBV53)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R DB VERTICAL

PAGE 6911

(13 AUG 75)

REFERENCE DATA

REFERENCE DATA				PARAMETRIC DATA			
SREF	2690.0000 SQ.FT.	XTRP	1076.6800 IN. X0	RUDDER	-10.000	SPDRK	55.000
LREF	.474.8000 IN.	YTRP	.0000 IN. Y0	BOFLAP	16.300	L-ELVN	-4.000
BREF	.936.0880 IN.	ZTRP	.375.0000 IN. Z0	R-ELVN	4.000	MACH	1.100
SCALE	.0300						
ALPHA (1) =	-3.970	BETA (1) =	-3.853	MACH =	1.1014	Q =	600.89 P = 707.69 RNL = 3.1837
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.6919	.5527		.5423	.6817	.6429	
.025	.5246	.3615		.3513	.3513	.2551	
.050	.5173	.3704		.3482	.3694	.3084	
.150	.3793	.2750		.2843	.3234	.2985	
.300	.2293	.1948		.2326	.2928	.2400	
.520	.0560	.0623		.2779	.2972	.0971	
.655	-.4787	-.0859	-1777	.2699	.3238	-.4091	
.775	-.3687	-.093	1460	.1713	.1813	.0820	-.36659
.900	-.0182	.0639	.0987	.0822	-.1303	-.3823	
ALPHA (1) =	-3.931	BETA (2) =		.182 MACH =	1.1014	Q =	600.89 P = 707.69 RNL = 3.1837
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.7452	.6169		.6541	.5772	.4640	
.025	.2447	-.0190		-.1076	-.3166	-.3496	
.050	.3705	.1993		.0606	-.1494	-.3244	
.150	.2789	.1167		.1234	.0689	.0280	
.300	.1223	.0693		.0861	.1099	.1071	
.520	-.0301	-.0275		.1573	.2457	.0299	
.685	-.4987	-.1529	-1921	.1321	.1314	.1871	-.4485
.775	-.4607	-.1647	-.0334	.0344	.0773	.0094	-.4093
.900	-.1333	-.0579	-.0040	-.0052	-.0052	-.1784	-.3914

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OF 200 PRINTED BY
COMPUTER SYSTEM)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

PAGE 6912

(XEBV54)

(XEBV54)

(XEBV54)

SECTION 1 INVERTICAL

ALPHA (1) = -3.991 BETA (3) = 4.263 MACH = 1.1014 0 = 600.89 P = 707.69 RNL = 3.1837

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .5706 .5393 .5260 .2746 .1543

.026 .0227 -.3284 -.5113 -.7360 -.5819

.050 .0354 -.2360 -.5460 -.7279 -.5852

.150 .1307 -.0659 -.1988 -.5205 -.5618

.300 .0238 -.0756 -.1568 -.3222 -.4721

.520 -.1200 -.1334 -.0471 -.0107 -.3050

.632 -.5550 -.2223 -.2033 -.0442 -.0114

.775 -.4542 -.2592 -.1389 -.0950 -.0681 -.0496

.900 -.2538 -.1885 -.1467 -.1006 -.2153 -.4155

ALPHA (2) = .009 BETA (1) = -3.870 MACH = 1.1014 0 = 600.89 P = 707.69 RNL = 3.1864

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6444 .4907 .4601 .5807 .5424

.026 .4563 .2911 .2661 .2734 .1792

.250 .4578 .3015 .2543 .2880 .2417

.150 .3256 .2052 .1886 .2388 .2401

.300 .1637 .1227 .1327 .2294 .1976

.520 -.0073 .0028 .1658 .2715 .0575

.686 -.4985 -.1394 -.1463 .2051 .2910 -.4031

.775 -.3751 -.1507 -.0060 .1580 .1591 .0698

.900 -.1130 .0833 .0828 .0467 -.1378 -.4142

ALPHA (2) = .092 BETA (2) = .176 MACH = 1.1014 0 = 600.89 P = 707.69 RNL = 3.1864

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7065 .5565 .5295 .5086 .3753

.025 .1866 -.0622 -.1772 -.3209 -.5182

.050 .3259 .1501 -.0378 -.1652 -.4229

.150 .2402 .0677 .0509 .0299 -.0059

.300 .0759 .0072 .0290 .0571 .0529

.520 -.0849 -.0896 -.0769 .1071 .2142

.685 -.5129 -.2081 -.1522 .0781 .1628

.775 -.4037 -.2275 -.0874 -.0059 .0172

.900 -.1718 -.1063 -.0555 -.0437 -.2053

-.4403 -.4295 -.201 -.0201 -.4295

-.2053 -.4403 -.4295 -.201 -.0201 -.4295

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL.

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ALPHA (2) = .026 BETA (3) = 4.243 MACH = 1.1014 Q = 600.69 P = 707.69 RN/L = 3.1859

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6272 .4781 .4528 .5278 .2195 .0728

.025 -.0583 -.3517 -.5278 -.7911 -.6488

.050 -.0252 -.3052 -.5609 -.7800 -.6499

.150 .0666 .1257 -.2499 -.5044 -.6311

.300 -.0192 -.1283 -.2039 -.3480 -.5149

.520 -.1850 -.2060 -.0774 -.0123 -.1817

.695 .5401 -.2601 -.1793 -.0849 -.0437 -.4573

.775 -.4560 -.3099 -.1897 -.1286 -.0991 -.4588

.900 -.2676 -.2374 -.1916 -.1538 -.2359 -.4619

ALPHA (3) = 3.932 BETA (1) = -3.873 MACH = 1.1069 Q = 600.53 P = 707.91 RN/L = 3.1859

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6061 .4336 .3741 .4797 .4363

.025 .3514 .2188 .1853 .2018 .1174

.050 .3774 .2320 .1784 .2124 .1745

.150 .2610 .1344 .1151 .1673 .1847

.300 .1070 .0475 .0562 .1623 .1646

.520 -.0612 -.0697 .1153 .2923 .0401

.695 -.5700 -.1910 -.1534 .1134 .1657

.775 -.3916 -.2092 -.0637 .0817 .1444 .0542

.900 -.1629 -.0745 .0723 .0307 -.1477 .4436

ALPHA (3) = 3.933 BETA (2) = .171 MACH = 1.1009 Q = 600.53 P = 707.91 RN/L = 3.1859

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6768 .5006 .4500 .4344 .2927

.025 .1484 -.0978 .5006 .2139 .3427 .5454

.050 .2935 .1123 -.1219 .2172 .4317

.150 .2048 .0101 .0287 .0164 .0409

.300 .0238 .0520 -.0405 .0154 .0030

.520 -.1229 -.1372 .0595 .1657 .0780

.695 .5418 -.2291 .1509 .0180 .0213 .4821

.775 -.4141 -.2852 -.1465 -.0476 .0522 .4635

.900 -.2226 -.2226 -.1672 -.1056 -.0851 -.2297 .4699

(XEBV54)

(XEBV54)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

ALPHA (3) = 3.943 BETA (3) = 4.232 MACH = 1.1009 0 = 600.53 P = 707.91 RNL = 3.1659

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .5970 .4309 .3596 .1521 -.0129

.025 -.1086 -.3689 -.5530 -.8084 -.6866

.050 -.0241 -.3337 -.5945 -.7919 -.6859

.150 .0489 -.1795 -.3265 -.5123 -.6781

.303 -.0580 -.1716 -.2304 -.3778 -.5678

.520 -.2535 -.2714 -.1074 .0059 -.0859

.695 -.4779 -.3422 -.1631 -.1105 .0271

.775 -.4110 -.3380 -.2918 -.1641 -.1631

.900 -.2782 -.2494 -.2056 -.1905 -.2664

ALPHA (4) = 7.906 BETA (1) = -3.871 MACH = 1.1009 0 = 600.53 P = 707.91 RNL = 3.1662

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .6136 .3794 .3000 .3612 .3568

.025 .3386 .1565 .1078 .1499 .1617

.050 .3627 .1718 .1095 .1518 .1639

.150 .2148 .0663 .0536 .1161 .1823

.520 .0257 -.0272 .0063 .1437 .1329

.520 -.1103 -.0969 .0580 .2793 .0276

.635 -.6057 -.2133 -.1592 .0951 .1442

.775 -.4118 -.2331 -.0967 .0871 .0840

.900 -.1776 -.0351 .0273 .0106 -.1594

ALPHA (4) = 9.006 BETA (1) = .170 MACH = 1.1009 0 = 600.53 P = 707.91 RNL = 3.1662

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BV .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .6461 .4339 .3646 .3549 .2024

.025 .1320 -.1391 -.2687 -.3700 -.5548

.050 .2694 .0637 -.1957 -.2633 -.4628

.150 .1626 -.0474 -.0958 -.0762 -.0852

.300 -.0358 -.1218 .1289 .0424 -.0434

.500 -.1967 -.1969 .0261 .1021 -.1169

.685 -.5737 -.7332 -.1518 -.0363 .5005

.775 -.4289 -.5733 -.2142 -.1185 .0644

.910 -.2595 -.2290 -.1593 -.1008 -.0863

.910 -.2595 -.2290 -.1593 -.1289 -.2545

.910 -.2595 -.2290 -.1593 -.1289 -.4793

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TABULATED PRESSURE DATA - DA14B (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

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ALPHA (+) = 8.008

SECTION 1

BETA (+ 3) = 4.224 MACH = 1.1009 O = 600.53 P = 707.91 RNL = 3.1862

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6062	.3810		.2706	.0837	.0888
	.025	-.0370	-.3749		-.5849	-.8053	-.7247
	.050	.0292	-.3220		-.6222	-.7881	-.7179
	.150	.0725	-.1950		-.3841	-.5124	-.7382
	.300	-.1204	-.2252		-.2618	-.3888	-.6029
	.520	-.3055	-.3223		-.1495	-.0294	-.1157
	.665	-.5090	-.3864		-.1563	-.1559	-.0329
	.775	-.4469	-.3922		-.2141	-.2021	-.4972
	.900	-.3329	-.3054		-.2559	-.2375	-.5238

ALPHA (+ 5) = 11.922 BETA (- 1) = -3.854 MACH = 1.1005 O = 600.31 P = 708.13 RNL = 3.1832

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6431	.3627		.2293	.2607	.2909
	.025	.1956	.1116		.0745	.1085	.1230
	.050	.2872	.1339		.0750	.1012	.1475
	.150	.1496	.0298		.0159	.0875	.1163
	.300	-.0316	-.0573		-.0302	-.1107	.6396
	.520	-.1398	-.1193		.0176	.2156	.0084
	.665	-.6125	-.2125		-.1923	.0646	-.4403
	.775	-.4468	-.2492		-.1189	.0214	.0303
	.900	-.2897	-.1341		-.0431	-.0124	-.4342

ALPHA (+ 5) = 11.941 BETA (+ 2) = .179 MACH = 1.1005 O = 600.31 P = 708.13 RNL = 3.1832

SECTION 1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.6326	.3954		.2962	.2787	.1044
	.025	.1059	-.1735		-.2967	-.3916	-.5725
	.350	.2415	.0227		-.2359	-.3170	-.4698
	.150	.1354	-.0852		-.1459	-.1242	-.1411
	.300	-.0566	-.1619		-.1740	-.0838	-.0628
	.520	-.2372	-.2370		-.0748	-.0623	-.1430
	.665	-.5729	-.4832		-.0856	-.0203	-.5111
	.775	-.4511	-.2513		-.2433	-.1397	-.1277
	.900	-.2644	-.2452		-.1815	-.1563	-.2301

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

AMES 11-073(OAI48) - 140A/B/C/R ORB VERTICAL
ALPHA (deg) = 12.006 BETA (deg) = 4.239 MACH = 1.1005 0 = 600.31 P = 708.13 RNL = 3.1832

SECTION 1 : VERTICAL DEPENDENT VARIABLE CP

Z / CV	.1560	.3170	.4590	.6020	.6970	.8390	.9250
.000	.6364	.3577	.2040				
.025	.0103	-.3949	-.6073				
.050	.1061	-.3353	-.6396				
.075	.0762	-.2143	-.4285				
.100	.1452	-.2634	-.2929				
.125	.3395	-.3561	-.1904				
.150	.5573	-.4154	-.1533	-.1947	-.1897		
.175	.4711	-.4249	-.3327	-.2511	-.2393	-.1994	
.200	.3553	-.3553	-.3448	-.2877	-.2821	-.3410	-.5487

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TABULATED PRESSURE DATA - ORIVB (AMES 11-073-1)

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AMES 11-073(04148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF = 2690.0000 SQ.FT. XMNP = 1076.6800 IN. X0
 LREF = 474.8000 IN. YMNP = .0000 IN. Y0
 BREF = 936.0690 IN. ZMNP = 375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -3.986 BETA (1) = -3.861 MACH = .90063 Q = -600.64 P = 1057.8 RNL = 3.5876

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.000	.4926	.3543	.4681	.5732	.5252
	.025	.3724	.2532	.3071	.4240	.1122
	.050	.3545	.2497	.2852	.3544	.1713
	.150	.2190	.1484	.2021	.1780	.1340
	.300	.0803	.0555	.1397	.1315	.0600
	.520	.1391	.0498	.1532	.1187	.0744
	.695	.3323	.0071	.2116	.1060	.032
	.775	.2433	.0673	.0091	.0080	.1521
	.900	.1256	.0828	.0828	.1058	.2780
					.1467	.3079

ALPHA (1) = -3.902 BETA (1) = .179 MACH = .90063 Q = -600.64 P = 1057.8 RNL = 3.5876

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.000	.5659	.4782	.5623	.4383	.3639
	.025	.0589	-.2251	-.3648	-.4207	-.4839
	.050	.1720	.0267	-.0326	-.2595	-.4584
	.150	.0727	-.0608	-.0244	-.0685	-.0516
	.300	.0583	-.0859	-.0230	-.0074	-.1188
	.520	.2381	-.1730	.0519	.0741	.4263
	.695	.3733	-.0698	.0235	.0057	.0019
	.775	.2549	-.1248	-.0614	-.0685	-.3734
	.900	.1831	-.1831	-.1556	-.1910	-.3906

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-07310A14B1 -140A/B/C/R ORB VERTICAL

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ALPHA (1) = -3.952 BETA (3) = 4.262 MACH = .90063 Q = 600.64 P = 1057.8 RNL = 3.5876
 SECTION (1) VERTICAL
 Z-BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X-CV

.200 -.4791 .2450 .2978 -.0067 -.0457
 .225 -.1848 -.6655 -.6531 -.7202 -.5426
 .250 -.1140 -.5952 -.8110 -.7017 -.5315
 .150 -.1763 -.3208 -.4525 -.7060 -.4841
 .200 -.2229 -.2950 -.2874 -.6643 -.4628
 .225 -.1556 -.1321 -.2055 -.1423 -.3496 -.4943
 .250 -.1463 -.1292 -.1339 -.1546 -.1639 -.4699
 .150 -.2554 -.1732 -.1121 -.1116 -.1322 -.4635
 .200 -.2475 -.1977 -.2438 -.2259 -.1897 -.4536

ALPHA (2) = .074 BETA (1) = -3.874 MACH = .89883 Q = 599.16 P = 1059.5 RNL = 3.5834
 SECTION (1) VERTICAL
 Z-BY .1580J .3170C .4590 .6020 .6970 .8390 .9250

X-CV

.200 -.289 .2744 .3896 .5050 .4531
 .225 .2956 .1327 .2952 .2174 .1113
 .150 .2914 .1617 .2602 .2200 .1520
 .250 .1558 .0551 .1738 .1606 .1077
 .200 .0273 .0157 .1222 .1159 .0344
 .250 -.11765 -.0532 .1350 .0938 -.0932
 .150 -.2539 -.0116 -.1768 .0451 .0812 -.3652
 .200 -.1223 -.0532 -.0524 -.0370 -.0283 -.1668 -.3365
 .250 -.1202 -.0988 -.1203 -.1203 -.1655 -.2887 -.3588

ALPHA (2) = .083 BETA (2) = .167 MACH = .89883 Q = 599.16 P = 1059.5 RNL = 3.5834
 SECTION (1) VERTICAL
 Z-BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X-CV

.200 .5206 .3912 .5054 .3792 .2739
 .225 -.0105 -.2660 -.3526 -.4012 -.4858
 .150 .1227 .0306 .0486 -.2617 -.4579
 .250 .0082 -.0795 -.0384 -.0651 -.1078
 .200 -.1116 -.1113 -.0337 -.0235 -.0627
 .250 -.2677 -.1703 .0365 .0679 -.1353
 .150 -.3418 -.015 -.1809 .0063 -.0256 .0001
 .250 -.2469 -.1132 -.0632 -.0731 -.0861 -.4089
 .200 -.1143 -.1143 -.1513 -.1752 -.2095 -.3853
 .250 -.1143 -.1143 -.1513 -.1752 -.2095 -.4002

DEPENDENT VARIABLE CP

DEPENDENT VARIABLE CP</

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-07310A14B: -140A/B/C/R ORB VERTICAL							(XE87-35)	
SECTION 1: INVERTICAL			DEPENDENT VARIABLE CP			P = 1059.9 RNL = 3.5893		
Z/B	B	Y/C	Z/B	B	Y/C	Z/B	B	Y/C
1.000	.3379	.1822	.0851	-	.2336	-	.3250	
.925	.2670	.7264	-.7560	-	.6560	-	.5640	
.850	.1764	.6908	-.7520	-	.6374	-	.5503	
.775	.1801	.4267	-.5655	-	.6237	-	.4865	
.700	.3122	.3745	-.4087	-	.6201	-	.5096	
.625	.4214	.2452	-.0935	-	.2948	-	.5718	
.550	.3237	.1437	-.1683	-.0741	.1155	-.1527	.4387	
.475	.2544	.1231	-.1646	-.1519	.1497	-.1650	.3884	
.400	.2212	.2297	-.2338	-.2664	.2288	-.3406		
ALPHA = 51 = 11.973	BETA = 11 = -3.861	MACH = .89910	0	=	.599.49	P =	1059.5	RNL = 3.5890
SECTION 1: INVERTICAL			DEPENDENT VARIABLE CP			P = 1059.5 RNL = 3.5890		
Z/B	B	Y/C	Z/B	B	Y/C	Z/B	B	Y/C
1.000	.3525	.1356	.1653	-	.3135	-	.2643	
.925	.0224	.0156	.2221	-	.2000	-	.1193	
.850	.0452	.0292	.1788	-	.1868	-	.1217	
.775	.0758	.0460	.1164	-	.1266	-	.0579	
.700	.1534	.0914	.0857	-	.0705	-	.0126	
.625	.2751	.0893	.0970	-	.1128	-	.1199	
.550	.5591	.0982	.1990	-.0651	.0086	.0167	.3038	
.475	.2555	.0415	.0015	-.0252	.0568	-.1865	.3119	
.400	.9900	.0933	-.0978	-.1450	.1982	-.2969	.3121	
ALPHA = 51 = 11.987	BETA = 21 = .182	MACH = .89910	0	=	.599.49	P =	1059.5	RNL = 3.5890
SECTION 1: INVERTICAL			DEPENDENT VARIABLE CP			P = 1059.5 RNL = 3.5890		
Z/S	B	Y/C	Z/B	B	Y/C	Z/B	B	Y/C
1.000	.3170	.4590	.6020	.6970	.8390	.9250		
.925	.0432	.2225	-.3565	-	.2261	-	.0957	
.850	.0258	.1609	-.3380	-	.3623	-	.4828	
.775	.0757	.2021	-.0340	-	.2650	-	.3930	
.700	.2284	.2142	-.0692	-	.0975	-	.1126	
.625	.3259	.1706	-.0584	-	.0536	-	.0989	
.550	.3324	.1154	-.0093	-.0630	.0341	-	.1646	
.475	.2444	.1236	-.0826	-.0977	.1211	-.2264	.3301	
.400	.3110	.1152	-.1752	-.2071	.2459	-.3362		

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(DA148) - 140A/B/C/R ORB VERTICAL

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ALPHA (5) = 12.005 GETA (3) = 4.250 MACH = .89910 Q = 599.49 P = 1059.5 RN/L = 3.5890

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

X/CY	.000	.3728	.1532	.0228	-.3344	-.4193
.025	-.1275	-.5918	-.8593	-.8411	-.6830	-.6124
.050	-.0138	-.4634	-.5900	-.5900	-.6745	-.5677
.150	-.1316	-.3734	-.3117	-.3117	-.6697	-.5234
.350	-.3019	-.3876	-.1029	-.1029	-.6619	-.5644
.520	-.4587	-.2663	-.2247	-.0932	-.2390	-.5407
.695	-.3393	-.1555	-.1856	-.1872	-.0770	-.4136
.775	-.2797	-.1958	-.2546	-.2747	-.2070	-.1511
.900					-.2986	-.3776
					-.2750	-.2432
						-.3350

(XEBV55)

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TABULATED PRESSURE DATA - 04148 (ANES 11-073-1)

AMES 11-073(04148) - 140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF =	2690.0000	SQ.FT.	XMAP =	1076.6800	IN. X0
LREF =	.474 8000	IN.	YMAP =	.0000	IN. Y0
BREF =	936.0680	IN.	ZMAP =	375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -4.044 BETA (1) = -7.862 MACH = .59674 Q = -594.66 P = -2385.6 RNL = 4.8797

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP						
X/CV						
.000	.0145	-1798	.0228	.2481	.1615	
.025	.4900	.4331	.4762	.4199	.3741	
.050	.4339	.3791	.4168	.3821	.3371	
.150	.2858	.2453	.2939	.2587	.1959	
.300	.1345	.1163	.1955	.1641	.0810	
.520	-.1497	.0384	.1360	.1363	-.0869	
.685	-.2880	-.0036	-.1710	.0480	.0427	-.2931
.775	-.2435	-.0561	-.0387	-.0596	-.0549	-.1166
.900	-.1933	-.2114	-.2114	-.2106	-.1883	-.2654

ALPHA (1) = -3.971 BETA (2) = -3.856 MACH = .59674 Q = -594.66 P = -2385.6 RNL = 4.8797

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP						
Z/BV						
.000	.3755	.2747	.4150	.5097	.4743	
.025	.3193	.2416	.2365	.1627	.0585	
.050	.2977	.2288	.2290	.1721	.1304	
.150	.1609	.1053	.1487	.1105	.0689	
.300	.0371	.0105	.0789	.0567	.0006	
.520	-.2136	-.0314	.0680	.0482	.1360	
.685	-.2916	-.0605	-.1698	-.0134	-.0066	-.2981
.775	-.2409	-.1051	-.0995	-.1121	-.055	-.1611
.900	-.2271	-.2271	-.2559	-.2512	-.2545	-.2076

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(MEB55) (13 AUG 75)

PARAMETRIC DATA

RUDDER =	-10.000	SPDBRK =	55.000
BDFLAP =	16.300	L-ELVN =	-4.000
R-ELVN =	4.000	MACH =	.600

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

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ALPHA (1) = -3.944 BETA (3) = .179 MACH = .59674 0 = 594.66 P = 2385.6 RNL = 4.8797

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

Z/BV	.000	.5049	.4668	.4923	.3272	.3169
	.025	-.0163	-.3144	-.4551	-.3657	-.7308
	.050	.1032	-.0183	-.1248	-.2300	-.4064
	.150	.0231	-.0695	-.0616	-.1130	-.1131
	.300	-.0823	-.1076	-.0625	-.0669	-.1136
	.520	-.2896	-.1154	-.0309	-.0092	-.1814
	.685	-.3040	-.1138	-.1673	-.0911	-.0745
	.775	-.2372	-.1555	-.1573	-.1791	-.1997
	.900	-.2647	-.2647	-.3035	-.3126	-.3008

ALPHA (1) = -3.952 BETA (4) = 4.259 MACH = .59674 0 = 594.66 P = 2385.6 RNL = 4.8797

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

Z/BV	.000	.3350	.1876	.0537	.2271	.2654
	.025	-.3050	-.5818	-.6450	-.5761	-.11182
	.050	-.2467	-.4752	-.6065	-.5992	-.8937
	.150	-.2215	-.3731	-.4343	-.4819	-.6946
	.300	-.2096	-.2664	-.2754	-.3554	-.3621
	.520	-.3501	-.1937	-.1820	-.2098	-.2014
	.685	-.3195	-.1754	-.1738	-.1567	-.2002
	.775	-.2605	-.2079	-.2124	-.2677	-.3268
	.900	-.3129	-.3468	-.3828	-.3403	-.2993

ALPHA (1) = -3.967 BETA (5) = 8.330 MACH = .59674 0 = 594.66 P = 2385.6 RNL = 4.8797

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

Z/BV	.000	.0565	.4525	.5706	.7155	.4935
	.025	-.5634	-.1090	-.8932	-.7880	-.6012
	.050	-.5739	-.8506	-.8799	-.7759	-.5849
	.150	-.7441	-.8637	-.8611	-.7526	-.5409
	.300	-.3-63	-.5241	-.8237	-.6958	-.4887
	.520	-.3970	-.2808	-.5574	-.5645	-.4033
	.685	-.3275	-.2479	-.1736	-.4111	-.4967
	.775	-.2732	-.2585	-.2662	-.3695	-.3355
	.900	-.2486	-.3697	-.3952	-.3787	-.4204

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 1400A/B/C/R ORB VERTICAL							(XEBVSS)		
SECTION 1) VERTICAL		Z/BV		X/CV		DEPENDENT VARIABLE CP		RNL = 4.8906	
ALPHA (2)	.082	BETA (1)	-7.901	MACH	= .59728	Q	= 595.74	P	= 2395.6
.000	-.0414	-.2724		-.0826	.1587	.0926			
.025	-.4488	.3999		.4439	.3907	.3433			
.050	.3966	.3503		.3851	.2591	.3060			
.150	.2437	.2145		.2709	.2414	.1768			
.300	.1055	.0965		.1781	.1502	.0702			
.520	-.1599	.0379		.1145	.1273	.0674			
.685	-.2888	-.0065		.1499	.0368	.0406			
.775	-.2401	-.0571		-.0584	-.0745	-.0698			
.900		-.1979		-.2438	-.2439	-.2175			
ALPHA (2)	= .093	BETA (1)	= -3.873	MACH	= .59728	Q	= 595.74	P	= 2395.6
SECTION 1) VERTICAL		Z/BV		X/CV		DEPENDENT VARIABLE CP		RNL = 4.8906	
.000	.3100	.1981		.3360	.4433	.3969			
.025	.2758	.2125		.2384	.1554	.0699			
.050	.2500	.1957		.2100	.1578	.1105			
.150	.1239	.0843		.1258	.0961	.0533			
.300	.0005	-.0095		.0627	.0418	.0126			
.520	-.2250	-.0435		.0507	.0451	.1292			
.685	-.2895	-.0612		.1525	-.0262	-.0471			
.775	-.2352	-.1067		.1056	-.1318	-.1176			
.900		-.2286		-.2662	-.2693	-.2599			
ALPHA (2)	= .095	BETA (1)	= -1.179	MACH	= .59728	Q	= 595.74	P	= 2395.6
SECTION 1) VERTICAL		Z/BV		X/CV		DEPENDENT VARIABLE CP		RNL = 4.8906	
.002	-.4616	.4158		.4454	.2780	.2615			
.025	-.0450	-.3186		-.4204	-.3619	-.6917			
.050	-.0558	-.0523		-.1331	-.2315	-.3758			
.150	-.0155	-.0922		-.0698	-.1079	-.1246			
.300	-.1149	-.1272		-.0712	-.0759	-.1131			
.520	-.2898	-.1213		-.0376	-.0178	-.1734			
.685	-.2364	-.1154		-.1548	-.1110	-.0902			
.775	-.2429	-.1527		-.1702	-.1900	-.1841			
.900		-.2660		-.3111	-.3207	-.3087			

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R QRS VERTICAL

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ALPHA (2) = .092		BETA (4) = 4.242		MACH = .59728	P = .595.74	(XE8756)	
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP				RNL = 4.8906	
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250

X/CV

.000	-.2956	.1208		-.0352	-.2745	-.3371
.025	-.3394	.5860		-.7548	-.5865	-.0201
.050	-.2961	.5189		-.6605	-.5666	-.8034
.150	-.2497	.3918		-.4750	-.5028	-.7263
.300	-.2390	.2628		-.2484	-.4224	-.3169
.520	-.3563	.1929		-.1736	-.2185	-.1809
.685	-.3143	.1691		-.1575	-.1732	-.2188
.775	-.2576	.1958		-.2292	-.2684	-.3146
.900	-.3056	.3056		-.3564	-.3926	-.2552

ALPHA (2) = .089 BETA (5) = 8.296 MACH = .59728 P = .595.74 RNL = 4.8906

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV

.1580	.3170	.4590	.6020	.6970	.8390	.9250
-------	-------	-------	-------	-------	-------	-------

X/CV

.000	-.0947	-.5350		-.6152	-.7341	-.5590
.025	-.5961	-.1459		-.8924	-.7620	-.5811
.050	-.6125	-.9172		-.8965	-.7502	-.5572
.150	-.7567	.9598		-.8998	-.7223	-.5156
.300	-.3920	.5009		-.8984	-.6851	-.4661
.520	-.4149	.2600		-.5612	-.5522	-.3913
.665	-.3211	.2340		-.1639	-.3760	-.4855
.775	-.2728	.2394		-.2634	-.3137	-.3616
.900	-.3417	.3957		-.3536	-.3732	-.4563

ALPHA (3) = 4.036 BETA (1) = -7.914 MACH = .59696 P = .595.02 RNL = 4.8897

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV

.1580	.3170	.4590	.6020	.6970	.8390	.9250
-------	-------	-------	-------	-------	-------	-------

X/CV

.025	-.0904	-.3367		-.1987	.1065	.0468
.050	-.4177	.3617		-.4133	.3574	.3040
.150	.3596	.3190		.3593	.3251	.2762
.300	.2126	.1839		.2499	.2205	.1551
.520	.0813	.0771		.1599	.1327	.0593
.665	-.1595	.0275		.1030	.1171	-.0522
.775	-.2801	-.0559		-.1429	.0227	.0351
.912	-.2310	-.0578		-.0666	-.0896	-.0957
		-.2043		-.2585	-.2525	-.1555

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TABULATED PRESSURE DATA - 0414B (AMES 11-073-1)

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AMES 11-073(0414B) - 140A/B/C/R ORB VERTICAL
(XEBV581)

ALPHA (31) = 4.041 BETA (21) = -3.873 MACH = .59596 Q = 595.02 P = 2385.3 RNL = 4.8897

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.2676	.1363	.2645	.3775	.3313	
.025	.2385	.1927	.2220	.1444	.0677		
.050	.2110	.1621	.1900	.1437	.0953		
.150	.0865	.0623	.1095	.0788	.0444		
.300	-.0250	-.0238	.0522	.0312	-.0262		
.520	-.2389	-.0423	.0279	.0661	.1165		
.685	-.2948	-.0627	-.1466	-.0540	-.0081	.2361	
.775	-.2351	-.1037	-.1156	-.1338	-.1302	-.1408	.2338
.900	-.2289	-.2777	-.2737	-.2559	-.1784	-.2029	

ALPHA (31) = 4.096 BETA (31) = .178 MACH = .59596 Q = 595.02 P = 2385.3 RNL = 4.8897

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.4288	.3742	.3968	.2349	.2087	
.025	-.0656	-.3161	-.3893	-.3525	-.6077		
.050	-.0290	-.0654	-.1222	-.2392	-.3397		
.150	-.2374	-.1067	-.0746	-.1024	-.1293		
.300	-.1330	-.1363	-.0746	-.0776	-.1182		
.520	-.2995	-.1225	-.0529	-.0189	-.1650		
.685	-.2919	-.1121	-.1473	-.1048	-.0722	.2717	
.775	-.2291	-.1500	-.1703	-.1987	-.1690	-.1962	.2484
.900	-.2576	-.3150	-.3268	-.3157	-.2286	-.2154	

ALPHA (31) = 3.977 BETA (41) = 4.232 MACH = .59596 Q = 595.02 P = 2385.3 RNL = 4.8897

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.2577	.0823	-.0910	-.3486	-.4061	
.025	-.3472	-.5964	-.7365	-.5843	-.8768		
.050	-.3214	-.5519	-.6694	-.5614	-.7190		
.150	-.2720	-.3813	-.4848	-.5421	-.7489		
.300	-.2523	-.2630	-.2437	-.5211	-.2538		
.520	-.3508	-.1818	-.1796	-.1660	-.1999		
.685	-.2736	-.1655	-.1553	-.1883	-.1642	-.3144	
.775	-.2436	-.1967	-.2274	-.2611	-.2044	-.2723	
.900	-.3020	-.3621	-.3653	-.3470	-.2091	-.2540	

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

ALPHA (3) = 4.011 BETA (5) = 8.279 MACH = .59696 0 = 595.02 P = 2385.3 RNL = 4.8897
 SECTION 1 : VERTICAL
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-1431	-5831		-.7016		-.7542	-.6404
.025	-6439	-1469		-.9026		-.7306	-.5564
.050	-6593	-9686		-.9105		-.7193	-.5315
.100	-7951	-1.0319		-.9219		-.7191	-.4934
.200	-3631	-4564		-.9388		-.6804	-.4463
.500	-4109	-2645		-.5211		-.5684	-.3769
.685	-3159	-3081		-.3088		-.4854	-.3635
.775	-2745	-2515		-.2470		-.4501	-.3165
.803	-3429	-4116		-.2961		-.3754	-.3270

ALPHA (4) = 8.004 BETA (1) = -7.903 MACH = .59678 0 = 594.78 P = 2385.7 RNL = 4.8829

SECTION 1 : VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	-1448	-4648		-.2805		.0255	-.0055
.025	3761	3324		.3738		.3264	.2771
.050	3233	2872		.3323		.3007	.2488
.100	1854	1697		.2351		.2013	.1368
.200	0.718	.0721		.1525		.1237	.0427
.500	-1698	.0254		.0526		.1088	-.0679
.685	-2569	.0017		.0282		.0264	-.1966
.775	-2317	.2450		-.0595		-.0650	-.1712
.800	-1869	-2364		-.2137		-.1842	-.1326

ALPHA (4) = 8.017 BETA (2) = -3.872 MACH = .59678 0 = 594.78 P = 2385.7 RNL = 4.8829

SECTION 1 : VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.000	2299	0773		1948		.3161	.2574
.025	1929	1670		.2125		.1506	.0761
.050	1718	1421		.1792		.1407	.0917
.100	0575	0463		.1039		.0708	.0334
.200	0.234	.0263		.0507		.0238	.0123
.500	-2270	-0.396		.0259		.0533	-.1209
.685	-2318	-0517		-.1399		-.0148	-.2331
.775	-2298	-0949		-.1125		-.1231	-.2133
.800	-2156	-2698		-.2503		-.2028	-.1737

X/E8V56)

RNL = 4.8897

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R DB VERTICAL

SECTION 11: VERTICAL

Z/BV	X/CV	BETA (3) = .166	MACH = .59678	P = 594.78	RNL = 4.6929
.000	.4032	.3320	.3539	.2005	.1626
.025	-.0596	-.3028	-.3545	-.3470	.5326
.050	.0201	-.0750	-.1002	-.2180	.3013
.150	-.0568	-.1155	-.0743	-.1056	.1191
.300	-.1467	-.1422	-.0790	-.0799	.1157
.520	-.3617	-.1129	-.0540	-.0231	.1697
.685	-.2711	-.1077	-.1077	-.1323	.2482
.775	-.1582	-.1431	-.1741	-.1942	.1881
.306	-.2510	-.3178	-.3257	-.3114	-.22252
ALPHA (4) = 7.931	BETA (4) = 4.229	MACH = .59678	0	- 594.78	P = 2385.7 RNL = 4.6929
Z/BV	X/CV	BETA (4) = .229	MACH = .59678	P = 594.78	RNL = 4.6929
.000	.2569	.0561	-.1055	-.3995	.4597
.025	-.3562	-.6156	-.6742	-.5743	.7781
.050	-.3175	-.5933	-.6236	-.5625	.6509
.150	-.2592	-.3524	-.4800	-.5877	.7501
.300	-.2668	-.2735	-.2536	-.5150	.2166
.520	-.3593	-.1718	-.1815	-.0823	.2321
.685	-.2576	-.1613	-.1398	-.2153	.0937
.775	-.2431	-.1936	-.2271	-.2557	-.2913
.300	-.2903	-.3578	-.3532	-.3598	-.1940
ALPHA (4) = 7.987	BETA (5) = 8.286	MACH = .59678	0	- 594.78	P = 2385.7 RNL = 4.6929
Z/BV	X/CV	BETA (5) = .286	MACH = .59678	P = 594.78	RNL = 4.6929
.000	-.1905	-.6317	-.7657	-.7948	.7345
.025	-.6601	-.0778	-.8938	-.7150	.5384
.050	-.6860	-.5480	-.9035	-.7169	.5339
.150	-.8220	-.10417	-.9376	-.7294	.4982
.300	-.3995	-.4255	-.9840	-.7096	.4634
.520	-.5920	-.2770	-.4241	-.6003	.4001
.685	-.2957	-.2392	-.1589	-.4253	.5171
.775	-.2971	-.2578	-.2057	-.3515	.4613
.300	-.3465	-.3455	-.3839	-.3427	-.3388

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OF POOR QUALITY

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (5) = 11.920 BETA (1) = -7.867 MACH = .59570 0 = 594.67 P = 2385.8 RNL = 4.8946
 SECTION 1 : VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	-.1890	-5669		.3578		
	.025	.2908	.3057		.3457		
	.050	.2428	.2754		.3153		
	.150	.1020	.1488		.2221		
	.200	.0127	.0671		.1467		
	.520	-.1738	.0442		.0953		
	.695	-.2639	.0224		.0228		
	.775	-.2733	-.0181		.0512		
	.900		-.1622		.2303		

ALPHA (5) = 11.942 BETA (2) = -3.850 MACH = .59670 0 = 594.67 P = 2385.8 RNL = 4.8946

SECTION 1 : VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	2455	.0472		.1400		
	.025	.1879	.1543		.1981		
	.050	.1633	.1254		.1721		
	.150	.0333	.0332		.0904		
	.300	-.0714	-.0410		.0427		
	.420	-.2653	-.0406		.0215		
	.485	-.2755	-.0434		.1354		
	.775	-.2162	-.0218		.1100		
	.900		-.1958		.2634		

ALPHA (5) = 12.055 BETA (3) = .165 MACH = .59670 0 = 594.67 P = 2385.8 RNL = 4.8946

SECTION 1 : VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.020	-.3496	.2970		.3156		
	.025	-.0521	-.2903		.3469		
	.050	.0111	-.0854		.0782		
	.150	-.0683	-.1298		.0834		
	.300	-.1592	-.1506		.0659		
	.520	-.3076	-.1148		.1155		
	.655	-.2795	-.1051		.1355		
	.775	-.2130	-.1400		.1753		
	.900		-.2458		.3181		

DEPENDENT VARIABLE CP
 (NECESSARY)

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TABULATED PRESSURE DATA - 04148 (AMES 11-073-1)

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AMES 11-0731041480 - 140A/B/C/R DRB VERTICAL

ALPHA (5) = 12.053 BETA (4) = 4.239 MACH = .59670 Q = 594.67 P = 2385.8 RNL = 4.8946

SECTION 1 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

A/CY

.000	.2766	.379				
.025	.3487	.6407				
.050	.3044	.6085				
.150	.2555	.3591				
.300	.2777	.2779				
.525	.3653	.1875				
.685	.2549	.1647				
.715	.2460	.1905				
.900	.2976	.3626				

ALPHA (5) = 12.101 BETA (5) = 8.299 MACH = .59670 Q = 594.67 P = 2385.8 RNL = 4.8946

SECTION 1 VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

A/CY

.000	.1893	.6763				
.025	.7242	.1.0+77				
.050	.7638	.9544				
.150	.5124	.1.0492				
.300	.5005	.4505				
.420	.5124	.2752				
.685	.2554	.2624				
.715	.4352	.2935				
.900	.3894	.3894				

(XEV56)

DEPENDENT VARIABLE CP

P = 2385.8 RNL = 4.8946

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - INDIA/B/C/R ORB VERTICAL

(XEBV57) (13 AUG 75)

REFERENCE DATA

REFL = 2690.000 SQ.FT. XMRP = 1076.6800 IN. X0
 LREF = .474 8200 IN. YMRP = .0000 IN. Y0
 SREF = 936.5680 IN. ZMRP = .375.0000 IN. Z0
 SCALE = .0300

ALPHA (1) = -4.026 BETA (1) = -3.843 MACH = 1.3927 Q = 599.59 P = 441.59 RNL = 2.9059

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/B:	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/C:	.020	.1933	.6712	.6475	.6640	.5526	
	.025	.6073	.5231	.4637	.7542	.7447	
	.050	.6241	.5167	.4578	.7428	.7190	
	.150	.6253	.4203	.5030	.7125	.6498	
	.350	.3554	.3326	.5905	.7149		
	.550	.2208	.3599	.8745	.8038	.6116	
	.750	.1391	.8743	.8776	.8232	.4980	
	.950	.1271	.7990	.7754	.7371	.5895	
			.6310	.6524	.5758	.3810	

ALPHA (1) = -3.938 BETA (2) = .202 MACH = 1.3927 Q = 599.59 P = 441.59 RNL = 2.9059

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/B:	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/C:	.020	.1933	.6712	.7042	.7559	.7567	
	.025	.6073	.5231	.6291	.4481	.5150	
	.050	.6241	.5167	.6748	.5026	.5528	
	.150	.6253	.4203	.7231	.5955	.5708	
	.350	.3554	.3326	.5735	.6495	.5777	
	.550	.2208	.3599	.7459	.7300	.4566	
	.750	.1391	.8743	.7824	.7575	.6905	
	.950	.1271	.7990	.7580	.7170	.5760	
			.6310	.6524	.5616	.3667	

PARAMETRIC DATA

RUDDER = 10.000 SPDRK = 55.000
 BOFLAP = 16.300 L-ELVN = 4.000
 R-ELVN = 4.000 HACH = 1.400

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140a/B/C/R ORB VERTICAL

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(XEBV57)

(XEBV57)

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/B

.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.020	.7672	.6675	.6134	.6023	.5575
.025	.0322	-.0711	-.2591	.2679	.3686
.050	.1139	-.0795	-.3019	.2712	.3792
.150	.2136	.03C*	-.0021	.3869	.3893
.300	.2118	.0849	.1979	.1766	.3350
.520	.0475	.0635	.5022	.5329	.1276
.675	-.3765	.6251	-.1561	.6730	.5450
.775	-.3239	.5720	.6876	.6662	.5626
.920	-.4572	.5633	.5938	.4792	.4380

ALPHA = 2 = .015 BETA = 11 = -3.863 MACH = 1.3931

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/B

.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.020	.7157	.5920	.5734	.5859	.4855
.025	.5169	.4430	.3883	.6726	.6760
.050	.5408	.4444	.3833	.6626	.6535
.150	.4480	.3436	.3317	.6453	.5897
.200	.3104	.2564	.6569	.6610	.5002
.420	.1543	.2517	.8084	.7370	.4588
.685	-.3434	.7664	-.1585	.7654	.6845
.775	-.2518	.6727	.7475	.6858	.5549
.920	-.5823	.6184	.5831	.5334	.3576

ALPHA = 2 = .02 BETA = 12 = .195 MACH = 1.3931

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/B

.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

.020	.7567	.6681	.6242	.6337	.6276
.025	.2059	.0962	-.0232	.3365	.4319
.050	.3948	.2903	.0101	.3686	.4735
.150	.3707	.2129	.1632	.5087	.5070
.300	.2257	.1454	.4395	.5906	.5215
.520	.2647	.1971	.6607	.6479	.4004
.644	-.1655	-.1521	.7014	.6801	.6156
.775	-.3220	.5711	.5399	.5835	.5308
.920	-.5744	.5749	.5652	.5215	.3597

(XEBV57)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL (XEBV57)

M: FFA (4) = 7.848 BETA (3) = 4.251 MACH = 1.3931 0 = 599.59 P = 441.36 RN/L = 2.8959

SECTION 1: VERTICAL DEPENDENT VARIABLE CP

Z/E	PV	Z/E	PV	Z/E	PV	Z/E	PV
.000	.5610	.5071	.3853	.2919	.3063		
.025	.0967	.1513	.2546	.1011	.1309		
.050	.1430	.1288	.3858	.0954	.1354		
.150	.2149	.0099	.1678	.1290	.1448		
.250	.2476	.0568	.0810	.0141	.0651		
.520	.1154	.1201	.3309	.4456	.2083		
.835	.3937	.7910	.4718	.4180	.1926		
.955	.3553	.3063	.4431	.5284	.3821		
.960		.2363	.3615	.4257	.4179	.2506	
							.4472

ALPHA (5) = 11.907 ZETA (11) = -3.847 MACH = 1.3946 0 = 600.23 P = 440.88 RN/L = 2.9052

SECTION 1: VERTICAL DEPENDENT VARIABLE CP

Z/E	PV	Z/E	PV	Z/E	PV	Z/E	PV
.010	.550	.550	.4582	.3622	.3468	.2747	
.025	.2507	.2593	.1850	.1850	.4190	.4627	
.050	.1154	.2713	.1850	.1261	.4249	.4520	
.150	.2549	.1859	.1852	.0438	.4095		
.200	.3937	.0536	.5952	.4779	.3903		
.400	.1074	.0423	.6234	.5484	.3033		
.725	.1135	.5385	.1811	.5688	.4898	.2208	
.750	.3350	.5338	.5994	.5203	.4048	.4010	
.810	.6322	.4984	.4438	.3939	.2510	.4648	

ALPHA (5) = 11.590 ZETA (21) = 1.86 MACH = 1.3946 0 = 600.23 P = 440.88 RN/L = 2.9052

SECTION 1: VERTICAL DEPENDENT VARIABLE CP

Z/E	PV	Z/E	PV	Z/E	PV	Z/E	PV
.000	.6776	.4800	.3783	.3043	.3836		
.025	.1856	.0143	.1096	.0952	.2147		
.050	.3263	.1739	.1150	.0786	.2487		
.150	.2843	.0843	.0110	.3189	.2995		
.200	.0912	.0008	.0205	.4059	.3430		
.320	.0749	.0512	.3955	.4114	.1944		
.555	.4379	.4529	.4613	.3758	.2127		
.775	.3464	.3679	.5221	.3677	.3651		
.800		.3942	.4093	.3785	.4587		

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TABULATED PRESSURE DATA - OAI148 (AMES 11-073-1)

AMES 11-07310A1481 - 140A/B/C/R ORB VERTICAL
(XE81571)

SECTION 11 VERTICAL		DEPENDENT VARIABLE CP				P = 440.68				RNL = 2.9052			
Z/BV	X/CV	BETA 1 31 =	4.265	MACH =	1.3946	O =	600.23	P =	440.68	RNL =	2.9052		
.000	.6274	.4761		.3151		.2150		.2371					
.025	.1153	-.1518		-.3553		-.1843		.0677					
.050	.1737	-.1409		-.3869		-.1779		.0732					
.100	.2262	-.0359		-.1980		-.1938		.0675					
.200	.0495	-.0782		-.1280		-.0292		.1552					
.500	-.1444	-.1499		.2595		.3794		.1920					
.685	-.4112	-.3319		.1780		.3988		.3593					
.775	-.3578	.2526		.3789		.3467		.4316					
.900		.1824		.3131		.3676		.3593					
ALPHA 1 61 = 15.871		BETA 1 11 =	-3.822	MACH =	1.3964	O =							
SECTION 11 VERTICAL		DEPENDENT VARIABLE CP				P = 598.94				RNL = 2.9056			
Z/BV	X/CV	BETA 1 11 =	-3.822	MACH =	1.3964	O =							
.000	.7700	.5181		.3344		.2655		.2248					
.025	-.1969	.1278		-.1399		.3062		.4118					
.050	-.3526	.2503		.1427		.3316		.4045					
.100	.2379	.1135		.0840		.4167		.3739					
.200	.0000	-.0142		.1297		.4406		.3571					
.500	-.1005	-.0595		.5560		.5100		.2728					
.685	-.4162	.6509		.2029		.6010		.4497					
.775	-.3216	.5783		.6354		.4963		.3769					
.900		.4847		.5186		.4401		.3667					
ALPHA 1 61 = 15.883		BETA 1 21 =	-1.187	MACH =	1.3964	O =							
SECTION 11 VERTICAL		DEPENDENT VARIABLE CP				P = 598.94				RNL = 2.9056			
Z/BV	X/CV	BETA 1 21 =	-1.187	MACH =	1.3964	O =							
.000	.7044	.5015		.3310		.2422		.2597					
.025	.0900	-.0238		-.1472		-.1496		.1454					
.050	.2320	.1518		-.1548		.1538		.1627					
.100	.2797			-.0264		.2474		.2888					
.200	.0746	-.0335		-.0385		.3563		.3023					
.500	-.1174	-.0871		.3481		.3623		.1506					
.685	-.4476	.4370		-.1980		.4141		.2952					
.775	-.3692	.3536		.4566		.4873		.4551					
.900		.2907		.3745		.3779		.3057					

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TABULATED PRESSURE DATA - 0A14B (AMES 11-073-1)

AMES 11-073(0A14B) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF =	2690.0000	SO.FT.	XMAP =	1076.6900	IN. X0
LREF =	.74-.8000	IN.	YMAP =	.0000	IN. Y0
BREF =	936.0663	IN.	ZMAP =	.375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -4.015 BETA (1) = -3.834 MACH = 1.2474 Q = 600.07 P = 550.87 RNL = 3.0101

SECTION (1) VERTICAL

Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							

.000	.7661	.6255		.6319	.6018	.4785	
.025	.5939	.4610		.5097	.7153	.6859	
.050	.5995	.4626		.5237	.6962	.6579	
.150	.4842	.3629		.5604	.6562	.5796	
.300	.3284	.2775		.6481	.6446	.5349	
.520	.1589	.6127		.8156	.7470	.4069	
.685	-.3923	.8256	-.1693	.8164	.7596	.6851	-.3119
.775	-.1146	.6901	.7301	.7044	.6595	.5002	-.4591
.900		.5583	.5784	.5410	.4882	.2731	-.3416

ALPHA (1) = -4.012 BETA (2) = .202 MACH = 1.2474 Q = 600.07 P = 550.87 RNL = 3.0101

SECTION (1) VERTICAL

Z/BY	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							

.000	.8194	.6929		.6656	.7422	.6979	
.025	.2830	.0823		-.0413	.4776	.4800	
.050	.4405	.2984		.0232	.5098	.5076	
.150	.3922	.2157		.3222	.5475	.5095	
.300	.2221	.1475		.5570	.5898	.5034	
.520	.0601	.4392		.7211	.6765	.3814	
.685	-.4330	.7232	-.1629	.7471	.7152	.6361	-.3037
.775	-.1993	.6216	.7053	.6824	.6437	.4878	-.4570
.900		.4954	.5462	.5211	.4715	.2586	-.5294

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(XE8V58) (13 AUG 75)

PARAMETRIC DATA

RUDDER =	10.000	SPDBRK =	55.000
BOFLAP =	16.300	L-ELVN =	4.000
R-ELVN =	-4.000	MACH =	1.250

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TABULATED PRESSURE DATA - QM14B (AMES 11-073-1)

ALPHA (1) = -4.007 BETA (3) = 4.280 MACH = 1.2474 O = 600.07 P = 550.87 RN/L = 3.0101

SECTION 1: VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .0006 .7506 .6199 .5754 .6498 .5940

.025 .0750 -.1595 -.2444 -.3335 .3291

.050 .1067 -.1510 -.2692 .3352 .3376

.150 .2039 .0018 -.1035 .3376 .3645

.300 .1458 .0241 -.1460 .3664 .3581

.520 -.0221 .1693 .5629 .2653 .3592

.685 -.4794 .5915 -.1640 .7021 .5191 .2161

.775 -.2665 .5297 .5944 .6888 .6424 .3870

.900 .4177 .5017 .5274 .5288 .2111 .4975

ALPHA (2) = .035 BETA (1) = -3.858 MACH = 1.2470 O = 551.11 P = 551.11 RN/L = 3.0093

SECTION 1: VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7001 .5527 .5245 .5269 .4056

.025 .5091 .3963 .3329 .6404 .6183

.050 .5259 .3675 .3353 .6264 .5929

.150 .4119 .2891 .4337 .5924 .5189

.300 .2611 .2027 .5782 .5883 .4789

.520 .0879 .3021 .7544 .6025 .3618

.685 -.4433 .7633 -.1587 .7582 .7000 .6133

.775 -.1918 .6253 .5823 .6522 .6087 .4573

.900 .5178 .5178 .5382 .4952 .4420 .2395

ALPHA (1) = .545 BETA (2) = .189 MACH = 1.2470 O = 551.11 P = 551.11 RN/L = 3.0093

SECTION 1: VERTICAL

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7604 .6229 .5818 .6446 .6245

.025 .2350 .0274 .0924 .3768 .4117

.050 .3258 .2305 .0460 .4186 .4375

.150 .3240 .1472 .1004 .4819 .4486

.300 .6445 .0841 .4788 .5298 .4510

.520 .1021 .2839 .6387 .6108 .3250

.685 .7325 .6312 .6706 .5708 .2969

.775 .7257 .6415 .6512 .5917 .4463

.900 .7250 .7253 .5043 .7913 .4280 .2285

.925 .7255 .7255 .5043 .7913 .4280 .2285

.935 .7255 .7255 .5043 .7913 .4280 .2285

.945 .7255 .7255 .5043 .7913 .4280 .2285

.955 .7255 .7255 .5043 .7913 .4280 .2285

.965 .7255 .7255 .5043 .7913 .4280 .2285

.975 .7255 .7255 .5043 .7913 .4280 .2285

.985 .7255 .7255 .5043 .7913 .4280 .2285

.995 .7255 .7255 .5043 .7913 .4280 .2285

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(XEB0758)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (ANES 11-073-1)

AMES 11-073(OA148) - 14GA/B/C/R ORB VERTICAL (XEROX58)									
SECTION 11 VERTICAL									
DEPENDENT VARIABLE CP									
Z/BV	X/CV	ALPHA (2) = .037	BETA (3) = .4261	MACH = 1.2470	Q = .599.99	P = .531.11	RNL = 3.0093		
.000	.6825	.5510	.4945	.4945	.4945	.4945	.4945		
.025	.0282	-.1988	-.3740	-.3740	-.1707	.2489			
.050	.0192	-.2014	-.4224	-.4224	.1827	.2626			
.150	.1330	-.0753	-.1065	-.1065	.1685	.2816			
.300	.0939	-.0194	.1103	.1103	.0678	.2323			
.520	-.0760	-.0379	.4386	.4386	.5346	.0342			
.685	-.5066	.5501	-.1476	.5407	.4642	.5230	-.1547		
.775	-.3253	.4560	.5787	.5741	.4535	.4642	-.4030		
.900	.3569	.4476	.4699	.3638	.2657	.4881			
ALPHA (3) = 3.928	BETA (1) = -3.861	MACH = 1.2467	Q = .599.99	P = .531.34	RNL = 3.0120				
SECTION 11 VERTICAL									
Z/BV	X/CV	ALPHA (2) = .3170	BETA (3) = .4590	MACH = 1.2470	Q = .599.99	P = .531.34	RNL = 3.0120		
.000	.6301	.4944	.4436	.4436	.4521	.3372			
.025	.3818	.3063	.2499	.2499	.5539	.5476			
.050	.4195	.3156	.2497	.2497	.5445	.5263			
.150	.3223	.2199	.2508	.2508	.5246	.4581			
.300	.1910	.1327	.5161	.5161	.5310	.4231			
.520	.0311	.1775	.6861	.6868	.6105	.3166			
.685	-.5079	.6870	-.1708	.6918	.6373	.5524	-.3396		
.775	-.2440	.5695	.6317	.5978	.5625	.4133	-.4915		
.900	.4700	.4922	.4476	.3943	.2096	.5467			
ALPHA (3) = 3.929	BETA (1) = .4590	MACH = 1.2467	Q = .599.99	P = .531.34	RNL = 3.0120				
SECTION 11 VERTICAL									
Z/BV	X/CV	ALPHA (2) = .3170	BETA (3) = .4590	MACH = 1.2470	Q = .599.99	P = .531.34	RNL = 3.0120		
.000	.7140	.5586	.4978	.4978	.5391	.5348			
.025	.1629	-.0115	-.1423	-.1423	.2676	.3394			
.050	.3403	.1875	-.1125	-.1125	.3491	.3689			
.150	.2774	.0940	.0380	.0380	.4103	.3934			
.300	.1066	.0164	.3795	.3795	.6226	.2644			
.520	-.0555	.1217	.5536	.5536	.5278	.2844			
.695	-.5078	.5685	-.1689	.5909	.5618	.4917	-.3147		
.775	-.2953	.4720	.5911	.5836	.5351	.3942	-.4773		
.900	.3946	.4526	.4354	.3836	.1932	.5336			

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TABULATED PRESSURE DATA - OAIING (AMES 11-073-1)

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AMES 11-07310A1481 - 140A/B/C/R ORB VERTICAL							AMES 11-0731	
SECTION 1 : VERTICAL			DEPENDENT VARIABLE CP			AMES 11-0731		
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CV								
.000	.6058	.4951		.4135		.3875	.3271	
.025	-.0681	-.2387		-.4133		.0792	.1884	
.050	.0042	-.2230		-.4626		.0795	.2029	
.150	.1099	-.1266		-.2180		.0770	.2188	
.300	.0428			-.0691				
.520	-.1514	-.1407		.3815			.1235	
.625	-.4415	-.4682		-.1675		.4071	.5031	
.775	-.3513	.3568		.5066		.4393	.4653	
.920	.2855			.3966		.4188	.3740	
						.3512	.1768	
ALPHA (4) = 7.966	BETA (1) = -3.655	MACH = 1.2463	O = 0	S = 599.67	P = 551.57	R = 591.57	N = 3.0105	
SECTION 1 : VERTICAL								
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CV								
.000	.6473	.4545		.3755		.3698	.2586	
.025	.3344	.2346		.1758		.4766	.4809	
.050	.3829	.2589		.1603		.4685	.4622	
.150	.2711	.1600		.1448		.4567	.3985	
.320	.1460	.0623		.4804		.4740	.3656	
.620	-.0204	.1609		.6201		.5417	.2629	
.825	-.5131	.6271		-.1879		.4965	.3455	
.775	-.3116	.5201		.5831		.5667	.4843	
.920	.4636			.4279		.3470	.1781	
				.4493		.4017	.5387	
ALPHA (1) = 7.970	BETA (2) = .187	MACH = 1.2463	O = 0	S = 599.67	P = 551.57	R = 591.57	N = 3.0105	
SECTION 1 : VERTICAL								
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CV								
.000	.3904	.4954		.4100		.4218	.4239	
.025	.1561	-.0377		-.1684		.1853	.2876	
.050	.2555	.1472		.1507		.2458	.3112	
.150	.4442			-.0177		.3343	.3224	
.320	-.0358			.2721		.4107	.3250	
.620	.2793			.4717		.4400	.1938	
.825	.5036			.1802		.4082	.3264	
.775	.1386			.5283		.4772	.3384	
.920	.1385			.4042		.3364	.1583	
				.7559			.5267	

DATE 14 FEB 76

TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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AMES 11-07310148) -140A/B/C/R ORB VERTICAL
ALPHA (5) = 11.925 BETA = 31 = 4.259 MACH = 1.2454 0 = 599.32 P = 552.04 RNL = 3.0114
SECTION 1 HORIZONTAL

DEPENDENT VARIABLE CP
Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
A/CSV

.000	.6632	.4306	.2727	.1890	.1826
.325	.0584	-.2443	-.4508	-.0946	.0551
.650	.1250	-.2254	-.4875	-.0833	.0674
.975	.1643	-.0999	-.2916	-.1653	.0797
1.300	-.0334	-.1513	-.1105	-.1209	-.0942
1.625	-.2139	-.2292	.2959	.3760	.1256
1.950	-.4857	-.7476	-.1904	.4101	.3284
2.275	-.3672	-.2479	.3768	.4330	.2575
2.600	-.1774		.2867	.3119	.1055

110E87581

110E87581

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R O&B VERTICAL.

REFERENCE DATA

CHCF	=	2690.0000 SQ.FT.
LREF	=	.47+.8000 IN.
BREF	=	.936-.0680 IN.
SCALE	=	.0300

XTRP	=	1076.6800 IN. X0
YTRP	=	.0000 IN. Y0
ZTRP	=	.375-.0000 IN. Z0

ALPHA (1) = -4.026 BETA (1) = -3.831 MACH = 1.1006

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.6896	.5507	.5756	.5129	.3777		
.025	.5271	.3677	.5059	.6399	.5995		
.050	.5177	.3776	.5059	.6167	.5676		
.150	.3815	.2910	.5061	.5628	.4818		
.300	.2348	.2267	.5639	.5441	.4278		
.520	.0737	.5502	.7363	.6486	.2855		
.655	-.4481	.7363	-.1989	.7285	.3785	-.4595	
.775	-.0771	.6003	.6332	.5978	.5553	-.3723	-.5712
.900	-.4464	.4615	.4615	.4243	.3661	.1298	-.6220

ALPHA (1) = -3.894 BETA (2) =	.203 MACH = 1.1006	0 =	600.08 P =	707.67 RNL = 3.1605			
SECTION (1) VERTICAL	DEPENDENT VARIABLE CP						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY							
.000	.7449	.6177	.6119	.6812	.6245		
.025	.2467	-.0213	-.0098	-.4275	.4053		
.050	.3726	.1970	.2259	.4516	.4281		
.150	.2807	.1191	.3499	.4651	.4184		
.200	.1205	.0570	.4869	.4971	.4023		
.520	-.0334	.4506	.6625	.5972	.2792		
.685	-.4506	.6979	-.1961	.5324	.5619	-.4415	
.775	-.1480	.5595	.6154	.5860	.3716	-.5528	
.900	.4013	.4348	.4038	.3495	.1166	-.5968	

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(13 AUG 75)

DATE 11-DEC-78

REGULATED PRESSURE DATA - CA14B (AMES 11-073-1)

PAGE E948

AMES 11-073(CA14B) - 14CA/B/C/R ORB VERTICAL

(YES59)

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = 4.249$ MACH = 1.1009 0 = 600.17 P = 707.44 PN/L = 3.1827

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

$\alpha_{crit} = \alpha_2 = 3.955$ $\beta_{crit} = 1 - z = -3.848$ MACH = 1.0933 0 = 599.26 P = 708.35 PN/L = 3.1817

DEPENDENT VARIABLE CP

CP = 0.9250 0.9300 0.9350 0.9400 0.9450 0.9500 0.9550 0.9600 0.9650 0.9700 0.9750 0.9800 0.9850 0.9900 0.9950 1.0000

REFRACTIVE INDEX

REFRACTIVE INDEX PRESSURE DATA - 01-1-B (AMES 11-173-1)

DATE 11-172/CAL91-1424/B/C/P C92 VERTICAL
(XEB-59)

DEPENDENT VARIABLE CP	P = 710.33	P = 710.03	P = 710.01	P = 3.1878
CP	598.33	598.33	598.33	598.33
CP	599.26	599.26	599.26	599.26
CP	1.0333	1.0333	1.0333	1.0333
CP	4.247	4.247	4.247	4.247
CP	1.0217	1.0217	1.0217	1.0217
CP	0.9550	0.9550	0.9550	0.9550
CP	0.9330	0.9330	0.9330	0.9330
CP	0.9220	0.9220	0.9220	0.9220
CP	0.9113	0.9113	0.9113	0.9113
CP	0.9008	0.9008	0.9008	0.9008
CP	0.8903	0.8903	0.8903	0.8903
CP	0.8798	0.8798	0.8798	0.8798
CP	0.8697	0.8697	0.8697	0.8697
CP	0.8597	0.8597	0.8597	0.8597
CP	0.8497	0.8497	0.8497	0.8497
CP	0.8397	0.8397	0.8397	0.8397
CP	0.8297	0.8297	0.8297	0.8297
CP	0.8197	0.8197	0.8197	0.8197
CP	0.8097	0.8097	0.8097	0.8097
CP	0.7997	0.7997	0.7997	0.7997
CP	0.7897	0.7897	0.7897	0.7897
CP	0.7797	0.7797	0.7797	0.7797
CP	0.7697	0.7697	0.7697	0.7697
CP	0.7597	0.7597	0.7597	0.7597
CP	0.7497	0.7497	0.7497	0.7497
CP	0.7397	0.7397	0.7397	0.7397
CP	0.7297	0.7297	0.7297	0.7297
CP	0.7197	0.7197	0.7197	0.7197
CP	0.7097	0.7097	0.7097	0.7097
CP	0.6997	0.6997	0.6997	0.6997
CP	0.6897	0.6897	0.6897	0.6897
CP	0.6797	0.6797	0.6797	0.6797
CP	0.6697	0.6697	0.6697	0.6697
CP	0.6597	0.6597	0.6597	0.6597
CP	0.6497	0.6497	0.6497	0.6497
CP	0.6397	0.6397	0.6397	0.6397
CP	0.6297	0.6297	0.6297	0.6297
CP	0.6197	0.6197	0.6197	0.6197
CP	0.6097	0.6097	0.6097	0.6097
CP	0.5997	0.5997	0.5997	0.5997
CP	0.5897	0.5897	0.5897	0.5897
CP	0.5797	0.5797	0.5797	0.5797
CP	0.5697	0.5697	0.5697	0.5697
CP	0.5597	0.5597	0.5597	0.5597
CP	0.5497	0.5497	0.5497	0.5497
CP	0.5397	0.5397	0.5397	0.5397
CP	0.5297	0.5297	0.5297	0.5297
CP	0.5197	0.5197	0.5197	0.5197
CP	0.5097	0.5097	0.5097	0.5097
CP	0.4997	0.4997	0.4997	0.4997
CP	0.4897	0.4897	0.4897	0.4897
CP	0.4797	0.4797	0.4797	0.4797
CP	0.4697	0.4697	0.4697	0.4697
CP	0.4597	0.4597	0.4597	0.4597
CP	0.4497	0.4497	0.4497	0.4497
CP	0.4397	0.4397	0.4397	0.4397
CP	0.4297	0.4297	0.4297	0.4297
CP	0.4197	0.4197	0.4197	0.4197
CP	0.4097	0.4097	0.4097	0.4097
CP	0.3997	0.3997	0.3997	0.3997
CP	0.3897	0.3897	0.3897	0.3897
CP	0.3797	0.3797	0.3797	0.3797
CP	0.3697	0.3697	0.3697	0.3697
CP	0.3597	0.3597	0.3597	0.3597
CP	0.3497	0.3497	0.3497	0.3497
CP	0.3397	0.3397	0.3397	0.3397
CP	0.3297	0.3297	0.3297	0.3297
CP	0.3197	0.3197	0.3197	0.3197
CP	0.3097	0.3097	0.3097	0.3097
CP	0.2997	0.2997	0.2997	0.2997
CP	0.2897	0.2897	0.2897	0.2897
CP	0.2797	0.2797	0.2797	0.2797
CP	0.2697	0.2697	0.2697	0.2697
CP	0.2597	0.2597	0.2597	0.2597
CP	0.2497	0.2497	0.2497	0.2497
CP	0.2397	0.2397	0.2397	0.2397
CP	0.2297	0.2297	0.2297	0.2297
CP	0.2197	0.2197	0.2197	0.2197
CP	0.2097	0.2097	0.2097	0.2097
CP	0.1997	0.1997	0.1997	0.1997
CP	0.1897	0.1897	0.1897	0.1897
CP	0.1797	0.1797	0.1797	0.1797
CP	0.1697	0.1697	0.1697	0.1697
CP	0.1597	0.1597	0.1597	0.1597
CP	0.1497	0.1497	0.1497	0.1497
CP	0.1397	0.1397	0.1397	0.1397
CP	0.1297	0.1297	0.1297	0.1297
CP	0.1197	0.1197	0.1197	0.1197
CP	0.1097	0.1097	0.1097	0.1097
CP	0.0997	0.0997	0.0997	0.0997
CP	0.0897	0.0897	0.0897	0.0897
CP	0.0797	0.0797	0.0797	0.0797
CP	0.0697	0.0697	0.0697	0.0697
CP	0.0597	0.0597	0.0597	0.0597
CP	0.0497	0.0497	0.0497	0.0497
CP	0.0397	0.0397	0.0397	0.0397
CP	0.0297	0.0297	0.0297	0.0297
CP	0.0197	0.0197	0.0197	0.0197
CP	0.0097	0.0097	0.0097	0.0097
CP	-0.0097	-0.0097	-0.0097	-0.0097
CP	-0.0197	-0.0197	-0.0197	-0.0197
CP	-0.0297	-0.0297	-0.0297	-0.0297
CP	-0.0397	-0.0397	-0.0397	-0.0397
CP	-0.0497	-0.0497	-0.0497	-0.0497
CP	-0.0597	-0.0597	-0.0597	-0.0597
CP	-0.0697	-0.0697	-0.0697	-0.0697
CP	-0.0797	-0.0797	-0.0797	-0.0797
CP	-0.0897	-0.0897	-0.0897	-0.0897
CP	-0.0997	-0.0997	-0.0997	-0.0997
CP	-0.1097	-0.1097	-0.1097	-0.1097
CP	-0.1197	-0.1197	-0.1197	-0.1197
CP	-0.1297	-0.1297	-0.1297	-0.1297
CP	-0.1397	-0.1397	-0.1397	-0.1397
CP	-0.1497	-0.1497	-0.1497	-0.1497
CP	-0.1597	-0.1597	-0.1597	-0.1597
CP	-0.1697	-0.1697	-0.1697	-0.1697
CP	-0.1797	-0.1797	-0.1797	-0.1797
CP	-0.1897	-0.1897	-0.1897	-0.1897
CP	-0.1997	-0.1997	-0.1997	-0.1997
CP	-0.2097	-0.2097	-0.2097	-0.2097
CP	-0.2197	-0.2197	-0.2197	-0.2197
CP	-0.2297	-0.2297	-0.2297	-0.2297
CP	-0.2397	-0.2397	-0.2397	-0.2397
CP	-0.2497	-0.2497	-0.2497	-0.2497
CP	-0.2597	-0.2597	-0.2597	-0.2597
CP	-0.2697	-0.2697	-0.2697	-0.2697
CP	-0.2797	-0.2797	-0.2797	-0.2797
CP	-0.2897	-0.2897	-0.2897	-0.2897
CP	-0.2997	-0.2997	-0.2997	-0.2997
CP	-0.3097	-0.3097	-0.3097	-0.3097
CP	-0.3197	-0.3197	-0.3197	-0.3197
CP	-0.3297	-0.3297	-0.3297	-0.3297
CP	-0.3397	-0.3397	-0.3397	-0.3397
CP	-0.3497	-0.3497	-0.3497	-0.3497
CP	-0.3597	-0.3597	-0.3597	-0.3597
CP	-0.3697	-0.3697	-0.3697	-0.3697
CP	-0.3797	-0.3797	-0.3797	-0.3797
CP	-0.3897	-0.3897	-0.3897	-0.3897
CP	-0.3997	-0.3997	-0.3997	-0.3997
CP	-0.4097	-0.4097	-0.4097	-0.4097
CP	-0.4197	-0.4197	-0.4197	-0.4197
CP	-0.4297	-0.4297	-0.4297	-0.4297
CP	-0.4397	-0.4397	-0.4397	-0.4397
CP	-0.4497	-0.4497	-0.4497	-0.4497
CP	-0.4597	-0.4597	-0.4597	-0.4597
CP	-0.4697	-0.4697	-0.4697	-0.4697
CP	-0.4797	-0.4797	-0.4797	-0.4797
CP	-0.4897	-0.4897	-0.4897	-0.4897
CP	-0.4997	-0.4997	-0.4997	-0.4997
CP	-0.5097	-0.5097	-0.5097	-0.5097
CP	-0.5197	-0.5197	-0.5197	-0.5197
CP	-0.5297	-0.5297	-0.5297	-0.5297
CP	-0.5397	-0.5397	-0.5397	-0.5397
CP	-0.5497	-0.5497	-0.5497	-0.5497
CP	-0.5597	-0.5597	-0.5597	-0.5597
CP	-0.5697	-0.5697	-0.5697	-0.5697
CP	-0.5797	-0.5797	-0.5797	-0.5797
CP	-0.5897	-0.5897	-0.5897	-0.5897
CP	-0.5997	-0.5997	-0.5997	-0.5997
CP	-0.6097	-0.6097	-0.6097	-0.6097
CP	-0.6197	-0.6197	-0.6197	-0.6197
CP	-0.6297	-0.6297	-0.6297	-0.6297
CP	-0.6397	-0.6397	-0.6397	-0.6397
CP	-0.6497	-0.6497	-0.6497	-0.6497
CP	-0.6597	-0.6597	-0.6597	-0.6597
CP	-0.6697	-0.6697	-0.6697	-0.6697
CP	-0.6797	-0.6797	-0.6797	-0.6797
CP	-0.6897	-0.6897	-0.6897	-0.6897
CP	-0.6997	-0.6997	-0.6997	-0.6997
CP	-0.7097	-0.7097	-0.7097	-0.7097
CP	-0.7197	-0.7197	-0.7197	-0.7197
CP	-0.7297	-0.7297	-0.7297	-0.7297
CP	-0.7397	-0.7397	-0.7397	-0.7397
CP	-0.7497	-0.7497	-0.7497	-0.7497
CP	-0.7597	-0.7597	-0.7597	-0.7597
CP	-0.7697	-0.7697	-0.7697	-0.7697
CP	-0.7797	-0.7797	-0.7797	-0.7797
CP	-0.7897	-0.7897	-0.7897	-0.7897
CP	-0.7997	-0.7997	-0.7997	-0.7997
CP	-0.8097	-0.8097	-0.8097	-0.8097
CP	-0.8197	-0.8197	-0.8197	-0.8197
CP	-0.8297	-0.8297	-0.8297	-0.8297
CP	-0.8397	-0.8397	-0.8397	-0.8397
CP	-0.8497	-0.8497	-0.8497	-0.8497
CP	-0.8597	-0.8597	-0.8597	-0.8597
CP	-0.8697	-0.8697	-0.8697	-0.8697
CP	-0.8797	-0.8797	-0.8797	-0.8797
CP	-0.8897	-0.8897	-0.8897	-0.8897
CP	-0.8997	-0.8997	-0.8997	-0.8997
CP	-0.9097	-0.9097	-0.9097	-0.9097
CP	-0.9197	-0.9197	-0.9197	-0.9197
CP	-0.9297	-0.9297	-0.9297	-0.9297
CP	-0.9397</			

DATE 14 FEB 76

TABULATED P

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- 0A148 (AMES 11-073-1)

A148, -1140A/B/C/R ORB VERTICAL

SECTION (VERTICAL)

(XEBV59)

RN/L = 3.1878

BETA (3) =

.H = 1.0972

0 = 598.33

P = 710.00

RN/L = 3.1878

SECTION VARIABLE CP

(XEBV59)

Z/BV

.1580

.3170

.4590

.6020

.6971

.8390

.9250

X/CV

.000 .6274 .3557 .1950 .1486 .1494

.025 -.0192 -.4020 -.6043 -.1002 .0073

.050 .0588 -.3477 -.6348 -.0891 .0329

.075 .0612 -.2134 -.4689 -.1163 .0482

.100 .1516 -.2672 -.0825 -.1646 -.1201

.125 -.3416 -.2342 .2659 .3425 -.0081

.150 -.5629 .3190 -.1699 .2973 .2987 -.4722

.175 -.3958 .2153 .3552 .3737 .3141 .1751 -.5653

.200 .1854 .2416 .2229 .1900 -.0387 -.5814

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

(XEBV60) (13 AUG 75)

REFERENCE DATA

Z/F ₁	=	2530. C200 SQ.FT.	XMPR	=	1076.6800 IN. XO	RUDDER	=	10.000 SPDBRK
Z/F ₂	=	.474 B100 IN.	YMPR	=	.0000 IN. YO	BDFLAP	=	16.300 L-ELVN
Z/F ₃	=	.935. C200 IN.	ZMPR	=	.375.0000 IN. ZO	R-ELVN	=	-.4.000 MACH
SCALE	=	.3300						.900

ALPHA (1) = -4.026 BETA (1) = -3.841 MACH = .89803 Q = 598.77 P = 1060.7 RN/L = 3.5631

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/SV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CV	.039	.4935	.3592	.3763	.3092	.1911		
	.055	.3697	.2694	.4621	.5261	.4686		
	.059	.3593	.2575	.4375	.4980	.4326		
	.150	.2214	.1823	.4011	.4235	.3278		
	.362	.1608	.1255	.4347	.3898	.2564		
	.362	.10847	.4494	.5979	.5153	.4827	.0890	
	.655	.1814	.5183	.2129	.4338	.3831	.4102	
	.775	.2435	.4663	.4769	.4338	.3831	.1756	.3968
	.930	.288	.2654	.2218	.1535	.0610	.3873	
ALPHA (1)	= -4.025	BETA (2)	= .202	MACH = .89803	Q = 598.77	P = 1060.7	RN/L = 3.5631	
SECTION (1) VERTICAL								
Z/SV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	
X/CV	.390	.5664	.4799	.5767	.5723	.5106		
	.325	.0414	.2191	-.0031	.2903	.2397		
	.350	.1698	.323	.2121	.3113	.2717		
	.150	.0739	.0225	.2510	.3080	.2525		
	.730	-.0544	-.0149	.3351	.3348	.2288		
	.520	.1865	.3613	.5368	.4667	.1113		
	.655	.1947	.6221	-.2153	.4909	.4181	.3450	
	.775	-.2326	.4203	.4546	.3703	.1747	-.3611	
	.900	.2317	.2382	.1953	.1356	-.0574	-.3583	

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TASULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6953

 $\alpha_{\text{B-A}} + \beta_1 = .048$ $\beta_{\text{A}} + \beta_2 = .048$ $\beta_{\text{A}} + \beta_3 = .019$ MACH = .89813 Q = .598.75 P = 1060.5 RN/L = 3.5631

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/B	.1592	.3170	.4590	.5020	.6970	.8390	.9250
X/CY	.6200	.2656	.3488	.4091	.304		
	-.2209	-.7154	-.2480	.0386	-.1629		
	-.1971	-.6627	-.2404	.0428	-.1333		
	-.150	-.1921	-.1779	.0644	-.0192		
	-.303	-.2928	-.0906	.0741	.1006		
	-.622	-.4375	-.2659	.2901	.0976	-.0386	
	-.665	-.2213	-.4275	-.2092	.3506	.1751	.0503
	-.775	-.2345	-.3317	-.3821	.3731	.1962	.0023
	-.775	-.1562	-.1811	-.2028	.0744	-.0935	-.3568

 $\alpha_{\text{B-A}} + \beta_1 = 3.975$ $\beta_{\text{A}} + \beta_2 = -3.861$ MACH = .89723

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1592	.3170	.4590	.5020	.6970	.8390	.9250
X/CY	.3636	.2372	.2051	.1488	.0432		
	.2355	.1520	.4015	.4364	.3750		
	.2353	.1532	.3743	.4150	.3550		
	-.150	-.1507	.3473	.3469	.2479		
	-.150	-.0864	.0637	.3828	.3128	.2479	
	-.320	-.1392	.4051	.5065	.3933	.0219	
	.585	-.1516	.5844	-.1569	.4910	.3273	-.3105
	.775	-.2493	.4442	-.4202	.3528	.3002	.1121
	.775	-.2251	.2751	.2213	.1538	.0854	-.2958

 $\alpha_{\text{B-A}} + \beta_1 = 4.019$ $\beta_{\text{A}} + \beta_2 = .193$ MACH = .89723

SECTION 1 INVERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3173	.4590	.5020	.6970	.8390	.9250
X/CY	.4970	-.3465	-.4559	.4451	.3790		
	-.0259	-.3257	-.0322	.2293	.1733		
	-.650	-.0833	.1433	.2419	.1982		
	-.650	-.6609	-.1037	.1917	.2386	.1759	
	-.150	-.0449	-.0762	.2900	.2582	.1506	
	-.300	-.1562	-.3273	.4439	.3658	.0341	
	-.520	-.2409	-.5255	-.1800	.3923	.3240	-.2407
	-.665	-.2253	-.3255	-.3921	.2610	.1052	-.3493
	-.775	-.2353	-.2107	-.1797	.1265	.0690	-.3350

$\Delta_{\text{BETA}} + 3) = 3.944 \quad \text{BETA} + 3) = 4.252 \quad \text{MACH} = .89723 \quad 0 = 597.99 \quad P = 1061.2 \quad RNL = 3.5607$

SECTION 1 : VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.3671	.2135	.2670	.2656	.3454	.2415
.1526	-.3074	-.7465	-.2502	-.1998	.0109	-.1239
.1530	-.2191	-.7154	-.1201	-.1201	.0257	-.0917
.1535	-.2058	-.4514	-.2865	-.2497	.0317	-.0419
.1540	-.2147	-.2853	-.2556	-.2556	.0277	.0587
.1545	-.4556	.2531	-.1850	-.1850	.0466	-.0782
.1550	-.2208	-.1139	-.2556	-.2556	.0022	-.2765
.1555	-.2211	-.1216	-.2556	-.2556	-.3071	-.3054
.1560	-.1572	-.1572	-.1701	-.1701	.0706	-.0997
$\Delta_{\text{BETA}} + 3) = 8.020 \quad \text{BETA} + 2) = -3.857 \quad \text{MACH} = .89903 \quad 0 = 599.30 \quad P = 1059.3 \quad RNL = 3.5654$						

SECTION 1 : VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.2338	.1767	.1557	.1557	.0635	.0447
.1500	-.1735	-.1256	-.3677	-.3677	.3933	.3250
.1505	-.1704	-.1263	.3+12	.3+12	.3729	.2956
.1510	-.3553	-.6+84	.3176	.3176	.3133	.2045
.1515	-.3+82	-.3+82	.3564	.3564	.2766	.1386
.1520	-.3616	-.3616	.4744	.4744	.3443	-.0097
.1525	-.2122	-.5779	-.1795	-.4535	.3788	.2791
.1530	-.3+32	-.523	-.4103	-.3285	.2660	.0782
.1535	-.2657	-.2111	-.1263	-.0564	.1158	-.2738
$\Delta_{\text{BETA}} + 3) = 8.020 \quad \text{BETA} + 2) = .194 \quad \text{MACH} = .89903 \quad 0 = 599.30 \quad P = 1059.3 \quad RNL = 3.5654$						

SECTION 1 : VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.4557	.2745	.3297	.3297	.3731	.3084
.1505	-.1165	-.3430	-.0334	-.0334	.2039	.1578
.1510	-.1116	-.1116	.1232	.1232	.2177	.1698
.1515	-.1148	-.1148	.1144	.1144	.2103	.1379
.1520	-.1221	-.1221	.2695	.2695	.2219	.1085
.1525	-.1256	-.1256	.4095	.4095	.3097	-.0010
.1530	-.3634	-.1796	.4108	.3433	.2603	-.3260
.1535	-.3+54	-.3+54	.3212	.2456	.0610	-.3356
.1540	-.3+69	-.2251	.1003	.0421	-.1511	-.3232
$\Delta_{\text{BETA}} + 3) = 8.020 \quad \text{BETA} + 2) = .194 \quad \text{MACH} = .89903 \quad 0 = 599.30 \quad P = 1059.3 \quad RNL = 3.5654$						

DATE : FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL

PAGE 6955

$\alpha_{\text{L}} = \alpha_{\text{R}} = 8.224$ $\beta_{\text{TA}} (3) = 4.248$ MACH = .89903 0 = 599.30 P = 1059.3 RN/L = 3.5554

SECTION 1: INERTIAL

DEPENDENT VARIABLE CP

X/CY	Z/B	3437	1542	1979	.2801	.1791
.000	.3123	.7651	.2931	.0044	-.0846	
.025	.1552	.7269	.2834	-.0065	-.0614	
.050	.1192	.4634	.2460	.0015	-.0590	
.075	.3505	.3775	.1216	-.0006	.0021	
.100	.2397	.2215	.3250	.0145	-.1379	
.125	.2234	.4723	.1887	.1464	-.0226	
.150	.2269	.3058	.3342	.3172	-.0361	
.175	.1522	.1577	.1236	.0739	-.1059	
.200					-.2790	

$\alpha_{\text{L}} = \alpha_{\text{R}} = 11.919$ $\beta_{\text{TA}} (1) = -3.839$ MACH = .89963 0 = 599.94 P = 1059.0 RN/L = 3.5645

SECTION 1: INERTIAL

DEPENDENT VARIABLE CP

X/CY	Z/B	3437	1542	1979	.2801	.1791
.000	.3123	.1593	.0844	-.0383	-.1422	
.025	.1552	.5125	.3218	.2546	.2812	
.050	.1192	.0442	.3047	.3376	.2594	
.075	.3505	.0339	.2910	.2799	.1734	
.100	.2397	.0227	.3329	.2459	.0937	
.125	.2234	.3545	.1356	.3026	-.0412	
.150	.2269	.5462	.4226	.3393	.2181	
.175	.1522	.5542	.2168	.2359	.0489	
.200					-.2987	

$\alpha_{\text{L}} = \alpha_{\text{R}} = 11.929$ $\beta_{\text{TA}} (2) = -1.80$ MACH = .89963 0 = 599.94 P = 1059.0 RN/L = 3.5645

SECTION 1: INERTIAL

DEPENDENT VARIABLE CP

X/CY	Z/B	3437	1542	1979	.2801	.1791	
.000	.3123	.4034	.2425	.3570	.3388	.2617	
.025	.1552	.0521	.3189	-.0685	.1832	.1278	
.050	.1192	.073	.1775	.0821	.1939	.1392	
.075	.3505	.0827	.1315	.1515	.1842	.1169	
.100	.2397	.2114	.1425	.2453	.1996	.0889	
.125	.2234	.2537	.2169	.2912	.3239	.0239	
.150	.2269	.2537	.2145	.3911	.2356	-.0239	
.175	.1522	.2537	.2145	.2629	.2270	.0507	-.3078
.200							-.3154

(XEBV60)

DATE 11 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6956

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

(XEBVBD)

ALPHA / E = 11.915 BETA (Z) = 4.268 MACH = .89963 Q = 599.94 P = 1059.0 RN/L = 3.5645

STRUCTURE / INERTIAL

Z-BY .1580 .2173 .4590 .6020 .6970 .8390 .9250

X-CY

	3430	1419	1105	1915	10-0
.000	-.1355	-.6125	-.4213	.0721	-.0842
.005	-.0523	-.5193	-.3990	-.0634	-.0723
.010	-.1483	-.4189	-.3687	-.0621	-.0790
.015	-.2292	-.3322	-.0541	-.0550	-.0695
.020	-.4665	-.1556	.3285	.0056	-.1731
.025	-.2545	.2472	-.2227	.0016	-.2709
.030	-.2345	.2379	.2616	-.0081	-.2821
.035	.0003	.1553	.0808	.0358	-.2780

DEPENDENT VARIABLE CP

CASE 1 + FEB 75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)
 AMES 11-073(0A148) -140A/B/C ORB VERTICAL

PAGE 6957

(XEBV61) (13 AUG 75)

REFERENCE DATA

XREF = 1250.000 SOFT.
 XREF = 1.350 IN.
 YREF = 325.350 IN.
 ZREF = 2500
 SCALE = 1000

$A_{\text{BETA}}(1) = -1.014$ $\text{BETA}(1) = -7.854$ MACH = .59638
 SECTION 1: VERTICAL

$A_{\text{BETA}}(2) = -3.333$ $\text{BETA}(2) = -3.832$ MACH = .59638
 SECTION 2: VERTICAL

$A_{\text{BETA}}(3) = -1.014$ $\text{BETA}(3) = -7.854$ MACH = .59638
 SECTION 3: VERTICAL

X REF
 0.000
 0.653
 1.306
 1.959
 2.612
 3.265
 3.917
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DATE : + FEB 76

THERMATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

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(XEBV61)

A_F44 : 1 = -3.950 BETA : 31 = .201 MACH = .59638 0 = 594.21 P = 2386.5 RNL = 4.8411

SECTION : INERTIAL

DEPENDENT VARIABLE CP

Z_B : .1550 .2170 .4590 .6020 .6970 .8390 .9250

X_CG

.5076 .4726 .5282 .5037 .4422
.0085 -.2203 .0518 .2288 .1612
.1105 .3312 .1833 .2439 .1967

.0502 .0582 .2019 .2257 .1739

.1382 .1373 .2622 .2406 .1498

.1365 .1358 .4465 .3930 .0710

.1371 .1368 .4423 .3182 .-2351

.1375 .1369 .2766 .2543 .1354

.1376 .1364 .0339 .0143 .-0188

.1377 .1367 .0334 .0143 .-02295

A_F44 : 1 = -3.950 BETA : 41 = 4.282 MACH = .59638 0 = 594.21 P = 2386.5 RNL = 4.8411

SECTION : INERTIAL

DEPENDENT VARIABLE CP

Z_B : .1550 .2170 .4590 .6020 .6970 .8390 .9250

X_CG

.3735 .2259 .3902 .3597 .3546
.1826 .1820 .2287 .1456 .1421

.1226 .1220 .1739 .1055 .2528

.1381 .1376 .0565 .0231 .0095

.1363 .1358 .0503 .1324 .0858

.1370 .1369 .0217 .0313 .0313

.1370 .1369 .2892 .2514 .2493

.1371 .1369 .3180 .1988 .1160

.1372 .1369 .0357 .0115 .0318

.1373 .1369 .0357 .0115 .0318

.1374 .1369 .0357 .0115 .0318

.1375 .1369 .0357 .0115 .0318

.1376 .1369 .0357 .0115 .0318

.1377 .1369 .0357 .0115 .0318

A_F44 : 1 = -4.000 BETA : 51 = 8.352 MACH = .59638 0 = 594.21 P = 2386.5 RNL = 4.8411

SECTION : INERTIAL

DEPENDENT VARIABLE CP

Z_B : .1550 .2170 .4590 .6020 .6970 .8390 .9250

X_CG

.0509 -.3562 -.0585 -.0146 -.0084
.1545 -.3697 -.4743 -.2375 -.4120

.1546 -.7623 -.4461 -.2243 -.3554

.1547 -.7222 -.3692 -.2036 -.3349

.1548 -.2706 -.2015 -.1935 -.1467

.1549 -.1748 -.1570 -.1592 -.1561

.1550 -.2508 -.2495 -.0416 -.2709

.1551 -.2522 -.2499 -.0322 -.2787

.1552 -.0184 -.1104 -.1350 -.1512

.1553 -.2522 -.2499 -.0322 -.2787

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 5950

		AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL		(XEB-61)	
		DEPENDENT VARIABLE CP		P = 2386.1 RNL = 4.8452	
SECTION / 11. VERTICAL					
$\alpha_{\text{beta}} - 21 = .100$	$\beta_{\text{beta}} = .050$	$\beta_{\text{beta}} (4) = 4.254$	MACH = .59624 Q = 593.85	P = .593.85	RNL = 4.8452
Z/3	.1580	.3170	.4590 .6320 .6970 .8390 .9250		
X/C					
.120	.2921	.1555	.3164 .2975 .2674		
.125	.3332	.1519	.2483 .1424 .4183		
.130	.2854	.1552	.1996 .1173 .2510		
.135	.2235	.1573	.1003 .0965 .0393		
.140	.1665	.1573	.0395 .0952 .0846		
.145	.2233	.1573	.2748 .2661 .0265		
.150	.2125	.1698	.2791 .2618 .2353 .2281		
.155	.3275	.2125	.2342 .1907 .1569 .1155 .2350		
.160	.2117	.2117	.0192 -.0197 -.0649 -.0273 -.2109		
$\alpha_{\text{beta}} - 21 = .050$	$\beta_{\text{beta}} = .050$	$\beta_{\text{beta}} (5) = 8.317$	MACH = .59624 Q = 593.85	P = .593.85	RNL = 4.8452
Z/3	.1580	.3170	.4590 .6020 .6970 .8390 .9250		
X/C					
.120	.1093	.14911	.1736 .0277 .0296		
.125	.5934	.15617	.5135 .2171 .2554		
.130	.6035	.15545	.5055 .2091 .2304		
.135	.7822	.15753	.5755 .2067 .2234		
.140	.3448	.3916	.3916 .2225 .1390		
.145	.3422	.0653	.2185 .2046 .1855		
.150	.2912	.2133	.1749 .1386 .1705 .2057 .2357		
.155	.2763	.1295	.2062 .0190 .1131 .1749 .2212		
.160	.0546	.0546	.0318 -.0308 -.1358 -.1474 -.2118		
$\alpha_{\text{beta}} - 31 = .050$	$\beta_{\text{beta}} = .050$	$\beta_{\text{beta}} (1) = 7.901$	MACH = .59706 Q = 595.26	P = .595.26	RNL = 4.8521
Z/3	.1580	.3170	.4590 .5320 .6970 .8390 .9250		
X/C					
.120	.0540	.13271	.5698 .4694 .4681		
.125	.4107	.5229	.6339 .3112 .3323		
.130	.3555	.3222	.4428 .4230 .3342		
.135	.2155	.2331	.3775 .3669 .2368		
.140	.1662	.1662	.3505 .2917 .1490		
.145	.1303	.1303	.4357 .3138 .0208		
.150	.6155	.6155	.4154 .3610 .0565 .1639		
.155	.2451	.2451	.3328 .2519 .1191 .1467		
.160	.3535	.3535	.0205 .0537 .0068 -.1141		
.165	.1E+7	.1E+7	.0702		

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TRANSLATED PRESSURE DATA - CA148 (AMES 11-073-1)

ପ୍ରକାଶକ

DATE : 1-7-75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A1+B) -14CA/B/C/R ORB VERTICAL

$\alpha_{\text{BETA}} (4) = 8.042 \quad \text{BETA} (3) = .196 \quad \text{MACH} = .59720 \quad 0 = 595.49 \quad P = 2385.3 \quad RN/L = 4.8534$

SECTION 1: VERTICAL

Z/BV .1583 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4025 .3289 .3705 .3250 .2665
 .025 -.0949 -.2916 .0027 .1318 .0779
 .050 -.0081 -.0504 .1016 .1443 .0560
 .150 -.0574 -.0744 .1240 .1349 .0893
 .303 -.1219 -.0519 .1874 .1547 .0635
 .520 -.2356 -.2395 .3355 .2703 .0040
 .565 -.2315 -.4373 .2359 .2250 .2296 -.2069
 .775 -.2075 -.2670 .1834 .1511 .0619 -.1983
 .900 -.0569 -.0123 -.0329 -.0475 -.0645 -.1751

$\alpha_{\text{ALPHA}} (4) = 7.950 \quad \text{BETA} (4) = 4.251 \quad \text{MACH} = .59720 \quad 0 = 595.49 \quad P = 2385.3 \quad RN/L = 4.8534$

SECTION 1: VERTICAL

Z/BV .1583 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .2137 .0535 .1840 .1755 .1399
 .025 -.3733 -.5715 -.2876 -.1570 -.3702
 .050 -.3421 -.5514 -.2468 -.1412 -.2262
 .150 -.2687 -.5315 -.1898 -.1898 -.0208
 .320 -.2428 -.1725 .0070 .0643 .0516
 .520 -.1247 -.1257 .2613 .2415 -.0031
 .685 -.2739 -.3543 -.1619 .1793 .2241 -.1726
 .775 -.2228 -.2249 .1889 .1704 .0961 .0978 -.1570
 .900 -.0101 -.0536 -.0248 -.0698 -.0154 -.1535

$\alpha_{\text{ALPHA}} (4) = 7.955 \quad \text{BETA} (5) = 8.305 \quad \text{MACH} = .59720 \quad 0 = 595.49 \quad P = 2385.3 \quad RN/L = 4.8534$

SECTION 1: VERTICAL

Z/BV .1583 .3173 .4590 .6020 .6970 .8390 .9250

X/CV -.2270 -.6426 -.3136 -.1454 -.1341
 .025 -.7051 -.0609 -.5318 -.2347 -.1665
 .050 -.7263 -.9421 -.5278 -.2329 -.1585
 .150 -.8249 -.9915 -.5054 -.2300 -.1482
 .300 -.3768 -.3707 -.5149 -.2340 -.1555
 .520 -.2517 -.2576 -.2618 -.2651 -.2173
 .685 -.2711 -.2466 -.1709 -.3174 -.2699 -.2161
 .775 -.2521 -.1732 -.1257 .0106 -.2055 -.2440 -.2041
 .900 -.2158 -.0717 .0471 -.1489 -.1997 -.2107

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(XE8V61)

DEPENDENT VARIABLE CP

P = 595.49

RN/L = 4.8534

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 69B4

ALPHA (5) = 11.943 BETA (1) = -7.853 MACH = .59660 Q = 594.44 P = 2386.0 RN/L = 4.8439

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	-1.254	-5.175	-7.432	-6.329	-65.45		
.025	.2873	.3121	.3737	.3273	.2136		
.050	.2784	.2849	.3749	.3294	.2336		
.150	.1172	.11893	.3322	.2801	.1781		
.300	.0362	.1427	.3211	.2368	.1033		
.520	-.1245	.3919	.3716	.2540	.0227		
.785	-.2218	.5299	-.1454	.3511	.2102		
.775	-.2255	.4112	.3049	.2424	.2019	.0678	.2011
.900	.2002	.3788	.0530	.0318	-.0410	-.2041	

ALPHA (5) = 11.362 BETA (2) = -3.827 MACH = .59660 Q = 594.44 P = 2386.0 RN/L = 4.8439

SECTION (2) VERTICAL

Z/BV	.1580	.3170	.4590	.5020	.6970	.8390	.9250
X/CV							
.000	.2775	.0578	-.1003	-.1457	-.2912		
.025	.1598	.1594	.3136	.2957	.2267		
.050	.1530	.1471	.2770	.2810	.2085		
.150	.0443	.0594	.2411	.2082	.1195		
.300	-.0351	.0469	.2571	.1841	.0592		
.520	-.1994	.3285	.3515	.2396	-.0402		
.595	-.2258	.4973	-.1369	.2732	.1874	-.2030	
.775	-.2181	.3499	.2652	.2011	.1720	.0495	.1921
.900	.0421	.0389	.0155	-.0169	-.0574	-.1968	

ALPHA (5) = 11.967 BETA (3) = .197 MACH = .59660 Q = 594.44 P = 2386.0 RN/L = 4.8439

SECTION (3) VERTICAL

Z/BV	.1590	.3170	.4590	.6020	.6970	.8390	.9250
X/CV							
.000	.3880	.2959	.3355	.2791	.2149		
.225	-.0931	-.3021	-.0201	.1115	.0579		
.050	-.0033	-.0382	.0815	.1256	.0772		
.150	-.0744	-.0317	.1059	.1112	.0638		
.300	-.1332	-.0661	.1684	.1308	.0384		
.520	-.2509	.2553	.3022	.2314	-.0130		
.685	-.2411	.4247	-.1477	.2498	.2022	-.1933	
.775	-.2124	.2897	.2194	.1662	.1367	.0480	.1900
.900	.3651	-.0223	-.0430	-.0590	-.0618	-.1526	

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL
(XEV61)

(XEV61)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6965

ALPHA = 11.963 BETA (4) = 4.259 MACH = .59660 Q = 594.44 P = 2386.0 RNL = 4.8439
 AMES 11-073(OA148) -14CA/B/C/R ORB VERTICAL

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.249+	.0113	.1227	.0946	.0639	
.000	-.3558	-.5780	-.3119	-.1848	-.3801	
.025	-.3463	-.5806	-.2763	-.1681	-.2330	
.050	-.2732	-.3375	-.2233	-.2322	-.0076	
.150	-.2553	-.1798	-.0143	.0265	.0103	
.300	-.3107	.1931	.2488	.2123	.0596	
.500	-.2174	.3514	-.1578	.2524	.1908	-.1777
.595	-.209+	.2253	.1691	.1484	.0649	.1737
.775	.0139	-.0745	-.0521	-.0778	-.0507	-.1648
.900						
ALPHA = 11.951 BETA (5) = 8.316 MACH = .59660 Q = 594.44 P = 2386.0 RNL = 4.8439						
AMES 11-073(OA148) -14CA/B/C/R ORB VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.2391	.6845	-.4059	-.2151	-.1926	
.000	-.7265	-.1.0221	-.5539	-.2625	-.1688	
.025	-.2000	-.3471	-.5541	-.2533	-.1620	
.050	-.5529	-.1.0716	-.5485	-.2564	-.1608	
.150	-.4729	-.3948	-.5711	-.2748	-.1712	
.200	-.4518	.0195	-.2540	-.2988	-.2269	
.500	-.3399	.2001	-.1748	-.1574	-.3450	-.2248
.635	-.3225	.1391	-.1057	-.0602	-.2257	-.2293
.775	.0203	-.0391	-.0867	-.0520	-.1437	-.2165
.900						

(XE8V61)

(XE8V61)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 6967

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL (XEBV62)						
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP				
Z-BY	.1580	.3170	.4590	.6020	.6970	.8390
X/CY						
.025	-7649	.5672		.6131	.5590	.5232
.025	.0903	-.2732		-.2632	.0602	.2283
.050	.1146	-.2825		-.2039	.0609	.2385
.050	.2105	.0321		-.0613	.0583	.2559
.050	.2103	.2830		.0774	.0576	.2115
.050	.0456	.2950		.4034	.4393	.0380
.050	-.3733	-.4514	-.1544	.5292	.5572	.0139
.050	-.3514	.3299	.5345	.5734	.5792	.1294
.050	.3514	.2325	.4446	.5105	.4023	.2512
ALPHA (2)	= .024	BETA (1) = -3.867	MACH = 1.3922	0	= 599.99	P = 442.06
SECTION (1) VERTICAL						
Z-BY	.1580	.3170	.4590	.6020	.6970	.8390
X/CY						
.025	.7131	.5939		.5712	.5989	.5303
.025	.5201	-.2733		.3975	.5904	.6261
.050	.5419	.4427		.3913	.5995	.6079
.050	.4619	.3418		.3155	.5854	.5436
.050	.3935	.2556		.3764	.6082	.5225
.050	.3934	.2556		.2059	.6972	.4478
.050	.1532	.2059	-.1549	.7358	.6388	-.1769
.050	-.3472	.6133	.7410	.6681	.6264	.4954
.075	-.2844	.5030	.6309	.5503	.3117	-.2999
.050	.3500	.4441	.5324	.5267	.4850	.4086
ALPHA (2)	= .022	BETA (2) = .185	MACH = 1.3922	0	= 599.99	P = 442.06
SECTION (1) VERTICAL						
Z-BY	.1580	.3170	.4590	.6020	.6970	.8390
X/CY						
.025	.7638	.6754		.6236	.5691	.6101
.025	.2055	.0283		-.0233	.0239	.2533
.050	.5932	.2925		.0078	.0355	.3261
.050	.3711	.2149		.1613	.4365	.4190
.050	.2248	.1492		.1454	.5311	.4759
.050	.0693	.0574		.5831	.6282	.4055
.050	-.2849	.0574	-.1497	.6500	.6312	.1774
.050	-.2845	.1542	.5482	.6095	.6028	.4841
.050	.2241	.0576	.4556	-.9324	.2710	-.3815

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REGULATED PRESSURE DATA - CR148 (AMES 11-073-1)

AMES 11-073(CA148) - 14CA/B/C/R ORB VERTICAL

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(XE8V62)

SECTION : 1 VERTICAL

BETA : 1 3 = 3.983 BETA : 3 = 4.246 MACH = 1.3919 Q = 599.88 P = 442.29 RN/L = 2.9189

SECTION : 1 VERTICAL

BETA : 1 1 = 7.327 BETA : 1 = -3.985 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 2 = 7.332 BETA : 2 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 3 = 7.332 BETA : 3 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 4 = 7.332 BETA : 4 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 5 = 7.332 BETA : 5 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 6 = 7.332 BETA : 6 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 7 = 7.332 BETA : 7 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 8 = 7.332 BETA : 8 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 9 = 7.332 BETA : 9 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 10 = 7.332 BETA : 10 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 11 = 7.332 BETA : 11 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 12 = 7.332 BETA : 12 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 13 = 7.332 BETA : 13 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 14 = 7.332 BETA : 14 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 15 = 7.332 BETA : 15 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 16 = 7.332 BETA : 16 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 17 = 7.332 BETA : 17 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 18 = 7.332 BETA : 18 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 19 = 7.332 BETA : 19 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 20 = 7.332 BETA : 20 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

SECTION : 1 VERTICAL

BETA : 1 21 = 7.332 BETA : 21 = .1580 MACH = 1.3932 Q = 600.00 P = 441.59 RN/L = 2.9182

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DATE 14 FEB 75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 6972

$\alpha_{\text{crit}} = 15.915$ $\beta_{\text{crit}} = 31 = 4.239$ MACH = 1.3897 Q = 599.83 P = 443.71 RNL = 2.9243

AMES 11-07310A148) -140A/B/C/R ORB VERTICAL

(XEBV62)

SUBROUTINE (1) VERTICAL
DEPENDENT VARIABLE CP

Z	1550	.3170	.4530	.5020	.5970	.8390	.9250
X/Z	.0000	.0837	.5291	.2857	.1631	.1271	
	.005	.1245	.1521	.3551	.4676	.376	
	.010	.1257	.1152	.2352	.4693	.3925	
	.015	.1888	.1118	.2157	.2257	.2907	
	.020	.1736	.1736	.1491	.0511	.1113	
	.025	.1421	.1736	.1779	.2248	.0832	
	.030	.1621	.2054	.2279	.2844	.1901	
	.035	.1621	.2209	.2236	.2782	.3425	
	.040	.1481	.1481	.2160	.2301	.1494	.4577

DATE 14 FEB 76

TABULATED PRESSURE DATA - CA148 (ANES 11-073-1)

ANES 11-073(CA148) -14CA/B/C/R CRB VERTICAL

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(XEBV63) (13 AUG 75)

REFERENCE DATA

CREF = 2630.0000 IN.
 UREF = .474, BECO IN.
 ZREF = 936.0580 IN.
 SCALE = .0300

ALPHA (1) = -4.050 BETA (1) = -3.840 MACH = 1.2459

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

Z/CY	X/CY	1.523	.7642	.5259	.6094	.4372	.4417	.4592	.5555	.7439	.7375	.6633	.5975	.4305	.4815	
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1.781					</											

DATE 14 FEB 76

TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

AMES 11-073(OAI48) -140A/B/C/R CRB VERTICAL

(XE6V63)

A₁ P₁₂ = .345 BETA₁ = 31 = 4.255 MACH = 1.2451 Q = 599.58 P = 552.51 RNL = 3.0238

SECTION : 1) VERTICAL

Z_B = .1580 Z_170 = .4590 .6020 .6970 .8390 .9250

DEPENDENT VARIABLE CP					
Z_C	.6333	.5513	.4924	.4389	.3947
.325	-.2233	-.2019	-.3788	-.0626	.1168
.365	.0166	.2057	-.4291	-.0477	.1326
.385	-.1289	-.5677	-.1942	-.0723	.1485
.391	.5821	-.5217	-.0190	-.0413	.0737
.392	-.0724	-.1130	-.3486	.4920	-.0313
.393	-.0112	-.2672	-.1692	.4702	.4294
.394	-.2365	-.2771	-.4243	.4949	-.0694
.395	-.1144	-.2392	-.3650	.3926	.2312
A ₂ P ₁₂ = 31 = 3.930 BETA ₂ = 11 = -3.864 MACH = 1.2448 Q = 599.34 P = 552.51 RNL = 3.0213					
DEPENDENT VARIABLE CP					
Z_B	.1580	-.2170	.4590	.6020	.6970
Z_C	.5259	.4225	.4451	.4681	.3825
.360	-.2801	-.0734	.2497	.4856	.5020
.381	-.2812	-.2142	.2499	.4775	.4811
.382	-.1413	-.1412	.1891	.4671	.4152
.383	-.5113	-.1212	.2798	.4794	.3867
.384	-.0813	-.0812	.6158	.5652	.3059
.385	-.0218	-.0217	.1703	.5397	.5022
.386	-.1515	-.1514	.6158	.5022	.3063
.387	-.2787	-.1123	.5152	.4941	.4407
.388	-.3536	-.4383	.3901	.3448	.1613
A ₂ P ₁₂ = 31 = 3.930 BETA ₂ = 21 = 185 MACH = 1.2448 Q = 599.34 P = 552.51 RNL = 3.0213					
DEPENDENT VARIABLE CP					
Z_B	.1580	-.2170	.4590	.6020	.6970
Z_C	.7151	.6541	.4971	.4483	.4767
.360	-.025	-.0131	-.1375	.0172	.1887
.361	-.3551	-.0369	-.071	.0489	.2639
.362	-.3551	-.0369	-.0354	.3289	.3205
.363	-.2798	-.1381	.0752	.4049	.3463
.364	-.1015	-.0515	.4893	.5020	.2747
.365	-.0571	-.0369	-.1671	.5055	.4596
.366	-.5114	-.1514	-.4335	.4705	.2946
.367	-.2215	-.0715	-.3435	.3258	.4315
.368	-.0257	-.0137	-.3477	.1449	.4953

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(XEB-63)

$\beta_{\text{MACH}} = 3.25+$ $\beta_{\text{TA}} + \beta_1 = 4.245$ $\text{MACH} = 1.2448$ $Q = 599.34$ $P = 552.51$ $P_{\text{NL}} = 3.0213$

DEPENDENT VARIABLE CP

β_{CP}	β_{MACH}	β_{TA}	β_1	β_{P}	β_{NL}
.6108	.6122	.4122	.3313	.2722	
.6102	.6136	.4136	.1917	.0379	
.6114	.6150	.4150	.1843	.0503	
.6117	.6164	.4164	.1952	.0676	
.6126	.6178	.4178	.1113	.0730	
.6136	.6206	.4466	.4466	.0884	
.6142	.6242	.3624	.4451	.1785	
.6152	.6261	.27+0	.3336	.3554	
.6162	.6282	.1761	.3336	.4688	
.6172	.6302	.0666	.1508		
.6182	.6322	.0666	.1508		
.6192	.6342	.0666	.1508		
.6202	.6362	.0666	.1508		
.6212	.6382	.0666	.1508		
.6222	.6402	.0666	.1508		
.6232	.6422	.0666	.1508		
.6242	.6442	.0666	.1508		
.6252	.6462	.0666	.1508		
.6262	.6482	.0666	.1508		
.6272	.6502	.0666	.1508		
.6282	.6522	.0666	.1508		
.6292	.6542	.0666	.1508		
.6302	.6562	.0666	.1508		
.6312	.6582	.0666	.1508		
.6322	.6602	.0666	.1508		
.6332	.6622	.0666	.1508		
.6342	.6642	.0666	.1508		
.6352	.6662	.0666	.1508		
.6362	.6682	.0666	.1508		
.6372	.6702	.0666	.1508		
.6382	.6722	.0666	.1508		
.6392	.6742	.0666	.1508		
.6402	.6762	.0666	.1508		
.6412	.6782	.0666	.1508		
.6422	.6802	.0666	.1508		
.6432	.6822	.0666	.1508		
.6442	.6842	.0666	.1508		
.6452	.6862	.0666	.1508		
.6462	.6882	.0666	.1508		
.6472	.6902	.0666	.1508		
.6482	.6922	.0666	.1508		
.6492	.6942	.0666	.1508		
.6502	.6962	.0666	.1508		
.6512	.6982	.0666	.1508		
.6522	.7002	.0666	.1508		
.6532	.7022	.0666	.1508		
.6542	.7042	.0666	.1508		
.6552	.7062	.0666	.1508		
.6562	.7082	.0666	.1508		
.6572	.7102	.0666	.1508		
.6582	.7122	.0666	.1508		
.6592	.7142	.0666	.1508		
.6602	.7162	.0666	.1508		
.6612	.7182	.0666	.1508		
.6622	.7202	.0666	.1508		
.6632	.7222	.0666	.1508		
.6642	.7242	.0666	.1508		
.6652	.7262	.0666	.1508		
.6662	.7282	.0666	.1508		
.6672	.7302	.0666	.1508		
.6682	.7322	.0666	.1508		
.6692	.7342	.0666	.1508		
.6702	.7362	.0666	.1508		
.6712	.7382	.0666	.1508		
.6722	.7402	.0666	.1508		
.6732	.7422	.0666	.1508		
.6742	.7442	.0666	.1508		
.6752	.7462	.0666	.1508		
.6762	.7482	.0666	.1508		
.6772	.7502	.0666	.1508		
.6782	.7522	.0666	.1508		
.6792	.7542	.0666	.1508		
.6802	.7562	.0666	.1508		
.6812	.7582	.0666	.1508		
.6822	.7602	.0666	.1508		
.6832	.7622	.0666	.1508		
.6842	.7642	.0666	.1508		
.6852	.7662	.0666	.1508		
.6862	.7682	.0666	.1508		
.6872	.7702	.0666	.1508		
.6882	.7722	.0666	.1508		
.6892	.7742	.0666	.1508		
.6902	.7762	.0666	.1508		
.6912	.7782	.0666	.1508		
.6922	.7802	.0666	.1508		
.6932	.7822	.0666	.1508		
.6942	.7842	.0666	.1508		
.6952	.7862	.0666	.1508		
.6962	.7882	.0666	.1508		
.6972	.7902	.0666	.1508		
.6982	.7922	.0666	.1508		
.6992	.7942	.0666	.1508		
.7002	.7962	.0666	.1508		
.7012	.7982	.0666	.1508		
.7022	.8002	.0666	.1508		
.7032	.8022	.0666	.1508		
.7042	.8042	.0666	.1508		
.7052	.8062	.0666	.1508		
.7062	.8082	.0666	.1508		
.7072	.8102	.0666	.1508		
.7082	.8122	.0666	.1508		
.7092	.8142	.0666	.1508		
.7102	.8162	.0666	.1508		
.7112	.8182	.0666	.1508		
.7122	.8202	.0666	.1508		
.7132	.8222	.0666	.1508		
.7142	.8242	.0666	.1508		
.7152	.8262	.0666	.1508		
.7162	.8282	.0666	.1508		
.7172	.8302	.0666	.1508		
.7182	.8322	.0666	.1508		
.7192	.8342	.0666	.1508		
.7202	.8362	.0666	.1508		
.7212	.8382	.0666	.1508		
.7222	.8402	.0666	.1508		
.7232	.8422	.0666	.1508		
.7242	.8442	.0666	.1508		
.7252	.8462	.0666	.1508		
.7262	.8482	.0666	.1508		
.7272	.8502	.0666	.1508		
.7282	.8522	.0666	.1508		
.7292	.8542	.0666	.1508		
.7302	.8562	.0666	.1508		
.7312	.8582	.0666	.1508		
.7322	.8602	.0666	.1508		
.7332	.8622	.0666	.1508		
.7342	.8642	.0666	.1508		
.7352	.8662	.0666	.1508		
.7362	.8682	.0666	.1508		
.7372	.8702	.0666	.1508		
.7382	.8722	.0666	.1508		
.7392	.8742	.0666	.1508		
.7402	.8762	.0666	.1508		
.7412	.8782	.0666	.1508		
.7422	.8802	.0666	.1508		
.7432	.8822	.0666	.1508		
.7442	.8842	.0666	.1508		
.7452	.8862	.0666	.1508		
.7462	.8882	.0666	.1508		
.7472	.8902	.0666	.1508		
.7482	.8922	.0666	.1508		
.7492	.8942	.0666	.1508		
.7502	.8962	.0666	.1508		
.7512	.8982	.0666	.1508		
.7522	.9002	.0666	.1508		
.7532	.9022	.0666	.1508		
.7542	.9042	.0666	.1508		
.7552	.9062	.0666	.1508		
.7562	.9082	.0666	.1508		
.7572	.9102	.0666	.1508		
.7582	.9122	.0666	.1508		
.7592	.9142	.0666	.1508		
.7602	.9162	.0666	.1508		
.7612	.9182	.0666	.1508		
.7622	.9202	.0666	.1508		
.7632	.9222	.0666	.1508		
.7642	.9242	.0666	.1508		
.7652	.9262	.0666	.1508		
.7662	.9282	.0666	.1508		
.7672	.9302	.0666	.1508		
.7682	.9322	.0666	.1508		
.7692	.9342	.0666	.1508		
.7702	.9362	.0666	.1508		
.7712	.9382	.0666	.1508		
.7722	.9402	.0666	.1508		
.7732	.9422	.0666	.1508		
.7742	.9442	.0666	.1508		
.7752	.9462	.0666	.1508		
.7762	.9482	.0666	.1508		
.7772	.9502	.0666	.1508		
.7782	.9522	.0666	.1508		
.7792	.9542	.0666	.1508		
.7802	.9562	.0666	.1508		
.7812	.9582	.0666	.1508		
.7822	.9602	.0666	.1508		
.7832	.9622	.0666	.1508		
.7842	.9642	.0666	.1508		
.7852	.9662	.0666	.1508		
.7862	.9682	.0666	.1508		
.7872	.9702	.0666	.1508		
.7882	.9722	.0666	.1508		
.7892	.9742	.0666	.1508		
.7902	.9762	.0666	.1508		
.7912	.9782	.0666	.1508		
.7922	.9802	.0666	.1508		
.7932	.9822	.0666	.1508		
.7942	.9842	.0666	.1508		
.7952	.9862	.0666	.1508		
.7962	.9882	.0666	.1508		
.7972	.9902	.0666	.1508		
.7982	.9922	.0666	.1508		
.7992	.9942	.0666	.1508		
.8002	.9962	.0666	.1508		
.8012	.9982	.0666	.1508		
.8022	.9992	.0666	.1508		
.8032	.9992	.0666	.1508		
.8042	.9992	.0666	.1508		
.8052	.9992	.0666	.1508		
.8062	.9992	.0666	.1508		
.8072	.9992	.0666	.1508		
.8082	.9992	.0666	.1508		
.8092	.9992	.0666	.1508		
.8102	.9992	.0666	.1508		
.8112	.9992	.0666	.1508		
.8122	.9992	.0666	.1508		
.8132	.9992	.0666	.1508		
.8142	.9992	.0666	.1508		
.8152	.9992	.0666	.1508		
.8162	.9992	.0666	.1508		

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(0A148) - 140A/B/C/R ORB VERTICAL

ALPHA (5) = 11.890 BETA (3) = 4.256 MACH = 1.2456 Q = 599.56 P = 552.04 Rn/L = 3.0223

SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.665	.4298					
	.030	.0774	-.2494				
	.025	.1439	-.2315				
	.050	.1634	-.0998				
	.150	.1635	-.1537				
	.300	-.2189	-.2570				
	.520	-.4976	-.1908	-.1859			
	.695	-.4070	.3969	.2249	.3175	.2453	
	.775		.1501	.1501	.3092	.2042	.2648
	.920		.0298		.2175	.2218	.0902
							-.4925

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(XEBV63)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	XMRP =	1076.6800 IN. X0
LREF =	.474 8000 IN.	YMRP =	.0000 IN. Y0
BREF =	.936 .0580 IN.	ZMRP =	.375.0000 IN. Z0
SCA_E =	.0300		

ALPHA (1) = -3.951 BETA (1) = -3.840 MACH = 1.0981

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.6899	.5451	.5625	.5278	.4082
.000	.5257	.3599	.4754	.6049	.5740
.025	.5155	.3637	.4676	.5831	.5434
.050	.3827	.2600	.4605	.5269	.4525
.100	.2280	.2119	.5070	.5055	.3968
.200	.0626	.3816	.6587	.5746	.2651
.500	-.4648	.6128	.1681	.6509	.4982
.655	-.1128	.4979	.5520	.5703	-.4211
.775	.3493	.3975	.3658	.4937	-.5226
.900				.3132	.0762

ALPHA (1) = -3.948 BETA (2) = -.195 MACH = 1.0981

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	-.7453	.6223	.6180	.6982	.6559
.000	.2482	-.0162	-.1238	.3091	.2920
.025	.3692	.2017	.0269	.3516	.3451
.050	.2774	.1222	.2536	.4088	.3883
.100	.1233	.0659	.4017	.4489	.3757
.200	-.0319	.2553	.6054	.5580	.2674
.500	-.4978	.5333	.1817	.6163	.5585
.665	-.2056	.4243	.5042	.5091	.4907
.775	.900	.2916	.3520	.3443	.3001

ALPHA (1) = -3.948 BETA (2) = -.195 MACH = 1.0981

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.5000	.5.000	5.000	55.000
.025	.16300	.16.300	L-ELVN	-L-ELVN	-4.000
.050	.00000	.0.000	MACH	= MACH	.1.100

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(XEBV64) (13 AUG 75)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

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SECTION 1 : VERTICAL		DEPENDENT VARIABLE CP				(XEBV64)	
Z/BV	.1580	.3173	.4590	.6020	.6970	.8390	.9250
X/CPV							
.000	-6725	.5344		.4958		.5030	.4832
.025	.0231	-.3369		-.4772		.0238	.1005
.050	.0385	-.2356		-.4820		.0331	.1131
.125	-.1235	-.0695		-.1128		.0378	.1276
.375	.0182	-.0399		.1129		.0844	.1072
.625	-.1305	-.0579		.4022		.2742	-.0147
.665	-.5636	.3552		.4514		.2846	-.2354
.775	-.2865	.3360		.4234		.3185	-.3836
.800		.2350		.2991		.2231	.1925
ALPHA (2) = .059	BETA (3) = .3173	BETA (1) = .4590					
SECTION 1 : VERTICAL							
Z/BV	.1580	.3173	.4590	.6020	.6970	.8390	.9250
X/CPV							
.000	6421	+.8955		.4707		.4598	.3336
.025	.4521	-.2600		.3201		.5440	.5139
.050	-.4533	.2973		.3331		.5224	.4859
.150	.2221	-.2052		.3513		.4757	.4041
.300	.1597	.1172		.4449		.4596	.3538
.520	-.0129	.1777		.6225		.5362	.2313
.635	-.5316	.5532		.6468		.4503	-.4388
.775	-.1397	+.564		.5108		.4969	-.5235
.800		.3303		.3675		.3390	.2819
ALPHA (2) = .062	BETA (2) = .3173	BETA (1) = .4590					
SECTION 1 : VERTICAL							
Z/BV	.1580	.3173	.4590	.6020	.6970	.8390	.9250
X/CPV							
.000	7160	.5553		.5256		.6015	.5686
.025	-.1809	-.0711		-.1932		.2411	.2384
.050	.3259	.1485		-.0627		.2928	.2982
.150	.2383	.0668		.0299		.3493	.3319
.300	.0710	.002		.3305		.3948	.3236
.620	-.3912	.0691		.5344		.4971	.2184
.695	-.5221	-.599		.476		.4408	.4240
.775	-.2781	.554		.4592		.2744	-.5092
.800		.2509		.3146		.3028	.2584

SECTION 1 : VERTICAL		DEPENDENT VARIABLE CP				(XEBV64)	
Z/BV	.1580	.3173	.4590	.6020	.6970	.8390	.9250
X/CPV							
.000	7160	.5553		.5256		.6015	.5686
.025	-.1809	-.0711		-.1932		.2411	.2384
.050	.3259	.1485		-.0627		.2928	.2982
.150	.2383	.0668		.0299		.3493	.3319
.300	.0710	.002		.3305		.3948	.3236
.620	-.3912	.0691		.5344		.4971	.2184
.695	-.5221	-.599		.476		.4408	.4240
.775	-.2781	.554		.4592		.2744	-.5092
.800		.2509		.3146		.3028	.2584

DATE 14 FEB 76

TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

AMES 11-073(0H148) -140A/B/C/R ORB VERTICAL
ALPHA (2) = .059 BETA (3) = 4.253 MACH = 1.0998 Q = 599.80 P = 708.37 RNL = 3.1909

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .5020 .6970 .8390 .9250

X/CV	.6292	.4908	.4212	.4018	.3813
.025	-.0579	-.3524	-.5191	-.0305	.0604
.050	-.0361	-.3566	-.5586	-.0200	.0748
.150	.0801	-.1242	-.2530	-.0210	.0952
.320	-.0213	-.1329	-.0094	-.0373	.0753
.520	-.1277	-.2123	.3599	.3803	-.0905
.625	-.5339	-.3131	-.1602	.4267	.4075
.775	-.3379	.2522	.3902	.4073	.2510
.920	.915	.2659	.2861	.1921	.1307

ALPHA (3) = 4.021 BETA (1) = -3.865 MACH = 1.0995 Q = 600.25 P = 709.31 RNL = 3.1949

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .5020 .6970 .8390 .9250

X/CV	.6064	.4319	.3750	.3786	.2576
.025	.3776	.2171	.1763	.4748	.4593
.050	.3715	.2313	.1843	.4632	.4301
.150	.2583	.1325	.2455	.4229	.3549
.320	.1052	.0440	.4023	.4144	.3064
.520	-.0638	.0720	.5714	.4973	.1893
.685	-.6036	.5126	-.1516	.4802	.4096
.775	-.2613	.4127	.4769	.4179	.4507
.920	.3212	.3415	.3044	.2462	.5204

ALPHA (3) = 4.021 BETA (2) = .178 MACH = 1.0995 Q = 600.25 P = 709.31 RNL = 3.1949

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.6762	.4992	.4477	.4976	.4602
.025	-.1354	-.1058	-.2385	-.1494	.1894
.050	.2540	.1030	-.1489	.2182	.2469
.150	.1993	.0121	-.0360	.2842	.2761
.320	.0195	-.0570	.2544	.3398	.2768
.520	-.1347	-.0311	.4654	.4418	.1743
.685	-.5573	.3752	-.1448	.4375	.3867
.775	-.3252	.2854	.4054	.4105	.4213
.920	.2127	.2742	.2606	.2182	.5290

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL.

ALPHA (3) = 4.024 BETA (3) = 4.243 MACH = 1.0995 Q = 600.25 P = 709.31 RN/L = 3.1949

SECTION (1) VERTICAL.

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .5951 .4279 .3408 .2922 .2770

.025 -.1075 -.3754 -.5544 -.1458 .0056

.050 -.0441 -.3417 -.6015 -.1337 .0167

.150 -.0482 -.1799 -.3650 -.1608 .0430

.350 -.0616 -.1782 -.1159 -.1545 -.0266

.529 -.2515 -.2858 -.3128 -.4937 -.0536

.685 -.4848 -.2474 -.1559 .4014 .3275 .4009 .2673

.777 -.3335 .1639 .3341 .3735 .2939 .2568 .4167

.36 .1329 .2244 .2430 .1646 .0350 .4849

ALPHA (4) = 7.977 BETA (1) = -3.859 MACH = 1.0995 Q = 600.25 P = 709.31 RN/L = 3.1954

SECTION (1) VERTICAL.

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6136 .3606 .2976 .2886 .1595

.025 .3331 .1516 .1005 .4260 .4136

.555 .5589 .1701 .1040 .4146 .3887

.150 .2117 .0559 .1298 .3874 .3118

.300 .0231 .3224 .3563 .3786 .2677

.520 -.1142 .0198 .5334 .4450 .1569

.585 -.6324 .4589 .1531 .5232 .3692 .4469

.775 -.7212 .3875 .4541 .4239 .2158 .5212

.900 .3256 .3232 .2720 .2142 .0047 .5494

ALPHA (4) = 7.981 BETA (2) = .181 MACH = 1.0995 Q = 600.25 P = 709.31 RN/L = 3.1954

SECTION (1) VERTICAL.

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .6459 .4302 .3599 .3872 .3550

.025 .1341 .1423 .2830 .0639 .1432

.050 .2651 .0559 .2155 .1698 .1854

.150 .1585 .0776 .1049 .2233 .2181

.300 .3402 .1286 .1352 .2839 .2299

.520 -.2244 .1921 .3926 .3846 .1294

.685 -.5312 .3346 .4319 .3306 .4253

.775 -.3720 .2188 .3595 .3455 .2914 .4859

.900 .1925 .2403 .2335 .1882 .0163 .5191

(XEBV64)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-07310A148) -140A/B/C/R ORB VERTICAL
(XEBV64)

ALPHA (4) = 7.900 BETA (3) = 4.237 MACH = 1.0995 Q = 600.25 P = 709.31 RN/L = 3.1954

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.000	.6057	.3784	.2658	.1966	.1354
.025	-.0450	-.3848	-.5843	-.2744	-.0585	
.050	.0204	-.3348	-.6294	-.2644	-.0409	
.150	.0715	-.2026	-.4039	-.3178	-.0388	
.300	-.1304	-.2329	-.2120	-.1520	-.1971	
.520	-.3151	-.3389	-.2563	.3822	.1425	
.685	-.5220	-.1810	-.1558	.2698	.3267	-.3886
.775	-.3841	.0815	.2627	.3303	.1903	-.4484
.900	.0644	.1828	.1995	.1541	-.0265	-.4864

ALPHA (5) = 11.919 BETA (1) = -3.844 MACH = 1.0980 Q = 599.84 P = 710.72 RN/L = 3.1951

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.6435	.3646	.2315	.2008	.0598
.025	.2010	.1001	.0648	.3734	.3628
.050	.2650	.1290	.0629	.3632	.3389
.150	.1475	.0271	.0444	.3341	.2666
.300	-.0348	-.0351	.3393	.3360	.2292
.520	-.1481	-.0639	.4697	.3935	.1195
.685	-.6376	.4305	-.1886	.3827	.3197
.775	-.3716	.2584	.4237	.3838	.3407
.900	.0387	.3010	.2443	.1813	-.0140

X/CY	.6321	.3911	.2905	.2796	.2720
.025	.0973	-.1799	-.3169	-.0214	.0997
.050	.2363	.0155	-.2636	.0629	.1400
.150	.1319	-.0849	-.1552	.1705	.1713
.300	-.0728	-.1695	.0032	.2446	.1893
.520	-.2581	-.2533	.3345	.3250	.0893
.685	-.5892	.2471	-.1574	.3380	.2777
.775	-.3912	.1647	.3237	.3357	-.4347
.900	.1621	.2227	.2037	.1544	-.0372

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

(XE8V54)

ALPHA (5) = 11.925 BETA (3) = 4.249 MACH = 1.0980 Q = 599.84 P = 710.72 RNL = 3.1951

SECTION (1) : VERTICAL

Z/EV .1590 .3170 .4590 .5020 .6970 .8390 .9250

X/CV .6322 .3515 .2032 .0911 .0207

.025 -.0133 -.3994 -.6029 -.3853 -.1374

.039 -.0232 -.3752 -.6341 -.3744 -.1312

.150 -.0655 -.2052 -.4475 -.4468 -.1322

.321 -.1432 -.2638 -.2288 -.1804 -.3314

.526 -.3518 -.3598 .1921 .3101 .1445

.626 -.5549 -.1414 -.1819 .3090 .2205 .4034

.716 -.153 .0326 -.1990 .2737 .2493 .4630

.806 .0294 .1310 .1578 .1306 -.0574 -.4924

DEPENDENT VARIABLE CP

CP

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-07310A148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

CREF = .2693.0000 SQ.FT. XMRP = 1076.6800 IN. X0
 -REF = +74.8200 IN. YMRP = 0.0000 IN. Y0
 EREF = 935.0520 IN. ZMRP = 375.0000 IN. Z0
 SCALE = .3300

ALPHA (1) = -3.965 BETA (1) = -3.837 MACH = .90037 Q = 600.12 P = 1057.6 RN/L = 3.5768

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.000	.4641	.3565	.3758	.3998	.3234
.025	.3307	.2793	.4420	.4902	.4362	
.050	.3690	.2763	.4133	.4668	.4048	
.075	.2370	.1257	.3651	.3873	.3041	
.100	.1589	.1257	.3857	.3507	.2320	
.125	.1873	.2933	.5277	.4199	.0797	
.150	.1677	.4839	.2002	.5010	.3173	-.3346
.175	.2315	.3545	.3916	.3557	.1185	-.3517
.200	.1352	.1352	.2002	.1554	.0943	-.3517

ALPHA (1) = -3.963 BETA (2) = .195 MACH = .90037 Q = 600.12 P = 1057.6 RN/L = 3.5768

SECTION 1 :VERTICAL DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.000	.5715	.4552	.5775	.5855	.5486
.025	.0541	-.1911	-.0375	.1842	.1199	
.050	.1861	.0429	.1778	.2373	.1960	
.100	.0887	-.0937	.2012	.2557	.2161	
.125	-.0264	-.0172	.2933	.2805	.1858	
.150	-.1501	.2328	.4723	.3931	.0814	
.175	-.2116	.4-87	-.1953	.3964	.3119	-.3196
.200	-.2157	.3075	.3540	.3277	.2911	-.3319

REFERENCE DATA
 RUDER = 5.000 SPDBRK = 55.000
 BDFLAP = 16.300 L-ELVN = -4.000
 R-ELVN = -.4.000 MACH = .900

PARAMETRIC DATA
 (XEB8055) (13 AUG 75)

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TABULATED PRESSURE DATA - OR148 (AMES 11-073-1)

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ALPHA (1) = -3.957 BETA (3) = 4.274 MACH = .90037 Q = 600.12 P = 1057.6 RN/L = 3.5758
 SECTION 1: INERTIAL

(XEBV65)

AMES 11-07310A1481 -140A/B/C/R ORB VERTICAL

DEPENDENT VARIABLE CP

Z-BY .1590 .3170 .4590 .6020 .6970 .8390 .9250

X,CY .222 .4778 .2467 .4013 .4260 .3502

.625 -.1891 -.5635 -.3177 -.0200 -.1311

.550 -.1171 -.5234 -.3073 -.0157 -.1329

.150 -.1410 -.2570 -.2642 -.0001 -.0755

.530 -.2253 -.2282 -.1357 .0036 .0010

.562 -.2923 -.1611 -.2924 .0309 -.0736

.635 -.2343 -.2470 -.1881 .1448 -.0122

.115 -.2653 -.2482 -.3665 .1976 -.2799

.675 -.2373 -.1223 -.3232 .1517 -.3203

.690 -.0703 -.1223 .1555 -.0968 -.3616

ALPHA (2) = .532 BETA (1) = -3.869 MACH = .90007 Q = 599.62 P = 1057.3 RN/L = 3.5759

SECTION 1: INERTIAL

DEPENDENT VARIABLE CP

Z-BY .1590 .3170 .4590 .6020 .6970 .8390 .9250

X,CY .372 .2735 .2912 .3251 .2451

.225 .2239 .4155 .4556 .3999

.660 .3338 .2613 .3829 .4304 .3678

.180 .1156 .1538 .3393 .3532 .2704

.500 .5621 .1621 .3594 .3195 .1991

.520 -.1175 .2639 .4677 .3795 .0542

.685 -.1987 .4583 -.1723 .4531 .3709 .2765 .2956

.775 -.2373 .3703 .2624 .3197 .2327 .0885 .3051

.900 -.1932 .1742 .1298 .1298 -.0652 -.1114 -.2845

ALPHA (2) = .354 BETA (2) = .179 MACH = .90007 Q = 599.62 P = 1057.3 RN/L = 3.5759

SECTION 1: INERTIAL

DEPENDENT VARIABLE CP

Z-BY .1590 .3170 .4590 .6020 .6970 .8390 .9250

X,CY .525 .5275 .4936 .5115 .5211 .4647

.325 -.0022 -.2099 -.0508 .1608 .1048

.150 .1238 -.0211 .1476 .2107 .1663

.160 .0207 -.3159 .1709 .2253 .1831

.170 -.0990 -.5559 .2503 .2468 .1547

.180 -.2192 .2209 .4364 .2517 .0458

.185 -.2159 .4211 .1707 .2732 .3187

.175 -.2171 .2325 .3205 .2562 .0740 .3343

.160 -.2237 .1229 .0356 .0432 -.1351 -.3315

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

$\Delta_{\text{P-A}} : 2) = .050$ $\text{BETA} (3) = 4.252$ $\text{MACH} = .9007$ $\alpha = 599.62$ $P = 1057.3$ $RNL = 3.5759$

SECTION 1 VERTICAL

 $\alpha_{\text{BV}} : .1580 .3170 .4590 .6020 .6970 .8390 .9250$

X/CY

X/CY	.4218	.2757	.3208	.3547	.2850
.025	-.2753	-.7212	-.3589	-.0498	-.1219
.050	-.1934	-.6+15	-.3324	-.0476	-.1087
.150	-.1830	-.3724	-.3035	-.0413	-.0869
.350	-.2840	-.2852	-.1966	-.0469	-.0343
.550	-.4051	-.1275	-.2943	-.0036	-.1027
.685	-.2236	-.2669	-.1783	.3658	-.0330
.775	-.2257	.2225	.2750	.3089	-.0358
.950	.691	.976	.1239	.0591	-.3197

 $\alpha_{\text{PA4}} : 3) = -.021$ $\text{BETA} (1) = -3.873$ $\text{MACH} = .89817$ $\alpha = 598.16$ $P = 1059.3$

SECTION 1 VERTICAL

 $\alpha_{\text{BV}} : .1580 .3170 .4590 .6020 .6970 .8390 .9250$

X/CY

X/CY	.3729	.2256	.2098	.2394	.1585
.025	.2+17	.1757	.3920	.4143	.3546
.050	.3+03	.1655	.2505	.3916	.3254
.150	.1207	.0255	.3116	.3184	.2282
.350	.0161	.0+97	.3393	.2798	.1600
.550	-.1426	.2527	.4+40	.3476	.2246
.685	-.2142	.4542	-.1592	.4195	.2409
.775	-.2372	.3576	.3337	.2865	-.2532
.950	.1916	.1540	.0982	.0346	-.2644

 $\alpha_{\text{PA4}} : 3) = 4.021$ $\text{BETA} (2) = -183$ $\text{MACH} = .89817$ $\alpha = 598.16$ $P = 1059.3$

SECTION 1 VERTICAL

X/CY	.4947	.3544	.4500	.4610	.3949
.025	-.0650	-.2324	-.0672	.1366	.0763
.050	.0755	-.0649	.1153	.1843	.1363
.150	-.0262	-.0921	.1+82	.1909	.1487
.350	-.1329	-.0910	.2317	.2108	.1174
.550	-.2+42	.2044	.3881	.3073	.0137
.685	-.2217	.4052	-.1628	.3075	.2325
.775	-.2235	.2678	.2854	.2196	-.3137
.950	.12+0	.1016	.0520	.0070	.0420

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(XEBV65)

(XEBV65)

(XEBV65)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL

(XE8V65)

$\text{ALPHA} + 31 = 4.023 \quad \text{BETA} + 31 = 4.246 \quad \text{MACH} = .89817 \quad 0 = 598.16 \quad P = 1059.3 \quad RN/L = 3.5705$

SECTION : 11:EPICAL

Z/BV : .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY : .000 .3710 .2203 .2437 .2738 .2220
 .025 -.3015 .7474 .3595 .0736 .1061
 .050 -.2115 .4545 .3403 .0693 .0909
 .100 -.2611 .4416 .3204 .0698 .0935
 .150 -.3223 -.3114 .2042 .0802 .0857
 .200 -.3515 .1168 .3070 .0264 .1569
 .250 -.2314 .3325 -.1617 .3533 .1014 .0577
 .300 -.2242 .2205 .2462 .2700 .1941 .0466
 .350 -.0722 .0532 .0789 .055 .1156 .2901
 .400 -.0741 .0532 .0789 .055 .1156 .2963

$\text{ALPHA} + 41 = 7.976 \quad \text{BETA} + 11 = -3.866 \quad \text{MACH} = .89873 \quad 0 = 598.61 \quad P = 1059.8 \quad RN/L = 3.5705$

SECTION : 11:EPICAL

Z/BV : .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY : .000 -.2428 .1740 .1529 .1508 .0803
 .025 -.2130 .1420 .3504 .3776 .3197
 .050 -.1392 .1392 .3210 .3577 .2881
 .100 -.1355 .1355 .2872 .2903 .1960
 .150 -.1264 .1264 .3132 .2546 .1275
 .200 -.1214 .1214 .4183 .3073 .0123
 .250 -.1662 -.1639 .3667 .2811 .2082 .2604
 .300 -.1235 .1235 .3335 .2624 .3371 .2625
 .350 -.2393 .1154 .3779 .0056 .1407 .2561

$\text{ALPHA} + 41 = 7.681 \quad \text{BETA} + 21 = -.183 \quad \text{MACH} = .89873 \quad 0 = 598.61 \quad P = 1059.8 \quad RN/L = 3.5705$

SECTION : 11:EPICAL

Z/BV : .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY : .000 .6618 .2614 .3934 .3975 .3233
 .025 -.1026 -.1503 -.0613 .1366 .0725
 .050 -.1039 -.1507 -.1016 .1655 .1161
 .100 -.1532 -.1222 .1507 .1672 .1166
 .150 -.1627 -.1125 .2197 .1778 .0968
 .200 -.2603 .1359 .3674 .2614 .0223
 .250 -.2200 .1358 -.1648 .3525 .2574 .1942 .2967
 .300 -.2176 .1253 .2584 .2332 .1828 .0095 .3147
 .350 -.1426 .1426 .1454 .0420 -.0220 .1818 .3090

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

$$\text{ALPHA} (+) = 7.532 \quad \text{BETA} (+3) = 4.244 \quad \text{MACH} = .89873 \quad Q = 598.61 \quad P = 1058.8 \quad RN/L = 3.5705$$

SECTION : 1) VERTICAL

DEPENDENT VARIABLE CP

Z:BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X:CV .3382 .1702 .1843 .2085 .1533

.2425 -.7397 -.3785 -.1007 -.1153

.250 -.1351 -.6946 -.3552 -.0665 -.1002

.150 -.1742 -.4370 -.3427 -.0903 -.1031

.350 -.3164 -.3523 -.1645 -.0993 -.1038

.320 -.3531 .1023 -.3053 -.0331 -.1772

.555 -.2341 .3152 -.1657 .3259 .1359 -.0491 -.2549

.775 -.2217 .1939 -.2352 .2358 .1952 -.0567 -.2723

.900 -.6714 .6714 .0614 .0448 .0253 -.1164 -.2647

ALPHA (+5) = 11.307 BETA (+1) = -3.854 MACH = .89780 Q = 598.05 P = 1060.0 RN/L = 3.5707

SECTION : 1) VERTICAL

DEPENDENT VARIABLE CP

Z:BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X:CV .3530 .1422 .0802 .0615 .0185

.226 .624 .620 .3105 .3452 .2795

.155 .1573 .061 .2647 .3273 .2538

.163 -.0367 -.0389 .2524 .2622 .1670

.322 -.1105 -.0295 .3012 .2257 .0963

.522 -.2200 .2335 .3957 .2676 .039.

.665 -.2574 .4622 -.2029 .3651 .1744 -.2679

.716 -.2353 .3559 .3234 .2561 .1926 .0050 -.2734

.913 -.2151 .1398 .0653 -.0071 -.1579 -.2599

ALPHA (+5) = 11.920 BETA (+2) = .190 MACH = .89780 Q = 598.05 P = 1060.0 RN/L = 3.5707

SECTION : 1) VERTICAL

DEPENDENT VARIABLE CP

Z:BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X:CV .3821 .2474 .3675 .3559 .2617

.626 -.0538 -.3199 .0874 .1073 .0445

.653 -.0560 -.1591 .0535 .1429 .0918

.153 -.0574 -.1533 .1090 .1431 .0906

.500 -.2129 -.1410 .1917 .1580 .0573

.522 -.2935 .1133 .3336 .2429 .0407

.696 -.2355 .2482 -.2003 .3292 .2320 .2855

.715 -.2161 .1229 .2612 .2123 .1637 .0012 -.2950

.911 -.1113 .0781 .0273 -.0374 -.1815 -.2902

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF =	2690.0000 SQ.FT.	X ^{MRP} =	1076.6900 IN. X0
LREF =	.474 8220 IN.	Y ^{MRP} =	.0000 IN. Y0
ZREF =	935.3582 IN.	Z ^{MRP} =	375.0000 IN. Z0
SCALE =	.0300		

ALPHA (1) = -4.037 BETA (1) = -7.846 MACH = .5948E

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	-.0097	-.2830	-.3364	-.1644	-.1629	
	.025	.4953	.4606	.5471	.5224	.4517	
	.050	.4496	.4142	.5082	.4983	.4205	
	.150	.2935	.2917	.4113	.3938	.2976	
	.300	.1794	.2010	.3929	.3284	.2005	
	.520	-.0839	-.2955	.4383	.3604	.0535	
	.665	-.2351	-.4150	.4551	.3253	.2681	-.1639
	.775	-.2458	-.2224	.2081	.2594	.1275	-.1594
	.900	.0759	.0327	.0360	.0289	.0111	-.1314
ALPHA (1)	= -3.899	BETA (2)	= -3.843	MACH	= .59482	O	= .59126
SECTION (1) VERTICAL						P	= 2387.4
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.000	.3565	.2298	.1870	.2783	.1459	
	.025	.3371	.2852	.4145	.4235	.3821	
	.050	.3070	.2666	.3759	.3902	.3438	
	.150	.1868	.1584	.3048	.3029	.2408	
	.300	.0728	.1057	.3043	.2717	.1616	
	.520	-.1507	.2391	.4111	.3421	.0487	
	.665	-.2392	.3747	.1754	.3793	.3021	.2627
	.775	-.2392	.2456	.2437	.2198	.2034	.1934
	.900		.0333	-.0040	-.0013	-.0158	-.2029

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(XEBV66) (13 AUG 75)

PARAMETRIC DATA

RUDDER =	5.000	SPTBPK =	55.000
BDFLAP =	16.300	L-ELVN =	-4.000
R-ELVN =	-4.000	MACH =	.600

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (1) = -3.894 BETA (3) = .194 MACH = .59482 0 = 591.26 P = 2387.4 RNL = 4.8005
 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4550	.6020	.6970	.8390	.9250
X/CV	.000	.5066	.4710	.5374	.5241	.4891	
	.025	.0033	-.2191	-.0281	.0955	.0419	
	.050	.1170	.0295	.1295	.1721	.1493	
	.150	.0511	.0006	.1436	.1673	.1408	
	.300	.0364	-.0181	.2018	.1913	.1113	
	.520	-.2129	.1739	.3634	.3149	.0467	
	.685	-.2485	.3349	-.1809	.3466	.2504	
	.775	-.2270	.1904	.1995	.1825	.0808	
	.903		-.0178	-.0514	-.0440	-.0504	

ALPHA (1) = -3.902 BETA (4) = 4.271 MACH = .59482 0 = 591.26 P = 2387.4 RNL = 4.8005
 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4550	.6020	.6970	.8390	.9250
X/CV	.000	.3530	.2377	.3367	.2720	.2531	
	.025	-.2709	-.4966	-.2973	-.2393	-.5717	
	.050	-.2219	.4039	-.2483	-.1943	-.4772	
	.150	-.1754	-.2783	-.1387	-.1304	-.0622	
	.300	-.1546	-.1473	-.0171	.0469	.0275	
	.520	-.2759	.0508	.2155	.2136	.0164	
	.685	-.2716	.2420	-.1703	.2081	.1810	
	.775	-.2439	.1207	.1541	.1073	.0510	
	.900		-.0752	-.0829	-.0930	-.0567	

ALPHA (1) = -3.917 BETA (5) = 8.333 MACH = .59482 0 = 591.26 P = 2387.4 RNL = 4.8005
 SECTION (1) VERTICAL DEPENDENT VARIABLE CP

Z/BV	.1580	.3170	.4550	.6020	.6970	.8390	.9250
X/CV	.000	-.0313	-.3301	-.1656	-.1372	-.0944	
	.025	-.5105	-.3475	-.5536	-.3602	-.3923	
	.050	-.5198	-.7693	-.5259	-.3640	-.3548	
	.150	-.6536	-.7715	-.4540	-.3533	-.2988	
	.300	-.3121	-.3822	-.3711	-.3176	-.2291	
	.520	-.3295	-.0453	-.2089	-.2174	-.2038	
	.685	-.2865	.1018	-.1743	-.1332	-.1789	
	.775	-.2606	.0326	.1281	-.1093	-.0587	
	.900		-.1608	-.1012	-.1949	-.1673	

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) - 140A/B/C/R ORB VERTICAL
 SECTION (1) VERTICAL
 DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CP
 .000 -.0326 -.3488
 .025 .4533 .4162
 .050 .4054 .3732
 .100 .2626 .2629
 .150 .3010 .1691
 .200 -.0365 .2753
 .250 -.0362 .4065
 .300 -.2452 .1651
 .350 -.2531 .2860
 .400 .0588 .0180

ALPHA (2) = .065 BETA (1) = -7.886 MACH = .59550 Q = 592.43 P = 2386.4 RN/L = 4.8075
 SECTION (1) VERTICAL
 DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CP
 .000 -.3043 -.1717
 .025 .2941 .2519
 .050 .2549 .2265
 .100 .1453 .1401
 .150 .3032 .0440
 .200 -.1539 .2227
 .250 -.2432 .3661
 .300 -.2347 .2410
 .350 .0316 -.0197

ALPHA (2) = .075 BETA (2) = -3.862 MACH = .59550 Q = 592.43 P = 2386.4 RN/L = 4.8075
 SECTION (1) VERTICAL
 DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CP
 .000 -.4643 .4190
 .025 -.0312 -.2010
 .050 .0209 -.0029
 .100 -.0118 -.0333
 .150 -.0680 -.0395
 .200 -.2259 .1599
 .250 -.2463 .3228
 .300 -.2275 .1802
 .350 .0133 -.0133

ALPHA (2) = .076 BETA (3) = .175 MACH = .59550 Q = 592.43 P = 2386.4 RN/L = 4.8075
 SECTION (1) VERTICAL
 DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CP
 .000 .4835 .4835
 .025 -.0465 -.0465
 .050 .1127 .1127
 .100 .1257 .1257
 .150 .1818 .1818
 .200 .3352 .3352
 .250 .1631 .1631
 .300 .1803 .1803
 .350 .0533 -.0533

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(XEBV66)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL

(XE8V66)

ALPHA (2) = .073 BETA (4) = 4.250 MACH = .59550 Q = 592.43 P = 2386.4 RN/L = 4.8075

SECTION 1 INERTIAL

DEPENDENT VARIABLE CP

Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .2986 .1709 .5144 -.3178 -.2640 -.2070 .1734

.025 -.3345 -.5144 -.2719 -.4594 -.2656 -.2337 -.5326

.050 -.2205 -.3124 -.2205 -.3124 -.2656 -.1960 -.4513

.150 -.1937 -.1640 -.2940 -.0797 -.1689 -.1827 -.1417

.350 -.1980 -.0797 -.2940 -.2235 -.1699 -.0279 .0056 -.0424

.520 -.2640 -.1104 -.2656 -.2235 -.1699 -.1980 .1918 -.0135

.695 -.2455 -.1104 -.2656 -.1104 -.1286 -.1930 .1574 .1476

.750 -.0957 -.1093 -.0957 -.1093 -.1093 -.0769 .0610 -.1571

.900 -.0957 -.1093 -.0822 -.1093 -.0822 -.1219 -.0365 -.1523

ALPHA (2) = .069 BETA (5) = 8.308 MACH = .59550 Q = 592.43 P = 2386.4 RN/L = 4.8075

SECTION 1 INERTIAL

DEPENDENT VARIABLE CP

Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .0939 -.4624 -.2584 -.1835 -.1381

.525 -.2553 -.2553 -.2553 -.2553 -.2553 -.3532 -.2807

.625 -.1574 -.1626 -.1626 -.1626 -.1626 -.5567 -.2650

.750 -.1613 -.1892 -.1892 -.1892 -.1892 -.5009 -.3416 -.2279

.800 -.2612 -.2681 -.2681 -.2681 -.2681 -.4519 -.3428 -.2042

.850 -.1351 -.1351 -.1351 -.1351 -.1351 -.2354 -.2406 -.2002

.900 -.1266 -.1266 -.1266 -.1266 -.1266 -.1432 -.1432 -.1432

.750 -.2675 -.0562 -.0562 -.0562 -.0562 -.0849 -.0849 -.0849

.900 -.1559 -.1559 -.1559 -.1559 -.1559 -.1327 -.1327 -.1327

ALPHA (3) = 4.021 BETA (1) = -7.299 MACH = .59494 Q = 591.36 P = 2386.7 RN/L = 4.8049

SECTION 1 INERTIAL

DEPENDENT VARIABLE CP

Z/EV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .0974 -.4341 -.5255 -.3272 -.2988

.025 -.4153 -.3749 .4501 -.4227 -.3414

.050 -.7732 -.3323 .4299 .4102 -.3252

.150 -.2215 -.2215 .3505 .3270 .2235

.300 -.1135 -.1135 .3258 .2641 .1379

.525 -.1144 -.0663 .3731 .2890 .0158

.655 -.2454 -.1351 -.1559 .2624 .2166 -.1535

.750 -.2533 -.0662 .2449 .1945 .0914 -.1243

.900 -.0334 -.0334 .0030 -.0003 -.0141 -.1279

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

ALPHA (3) = 4.024 BETA (2) = -3.864 MACH = .59494 0 = 591.36 P = 2386.7 RN/L = 4.8049

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

X/CV	.020	.2620	.1119	.0548	.1136	.0339
	-.C25	-.2455	.2157	.3194	.3461	.3032
	.C50	.2184	.1972	.3095	.3209	.2703
	-.150	.1082	.1085	.2505	.2455	.1716
	.350	.0089	.0521	.2547	.2151	.1041
	.520	-.1921	.2069	.3418	.2832	.0093
	.685	-.2455	.3549	-.1478	.2379	.1482
	.775	-.2272	.2346	.2109	.1759	.0698
	.900	.C356	.0228	-.0220	-.0192	-.1512

ALPHA (3) = 4.022 BETA (3) = .186 MACH = .59494 0 = 591.36 P = 2386.7 RN/L = 4.8049

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

X/CV	.060	.4305	.3734	.4279	.4078	.3636
	.C25	-.0594	-.0534	-.0585	-.0659	.0035
	.C50	-.0329	-.0244	.0837	.1219	.0895
	-.150	-.0216	-.0538	.1033	.1232	.0873
	.350	-.0959	-.0543	.1577	.1416	.0655
	.520	-.2339	.1603	.3013	.2552	.0141
	.685	-.2387	.5121	-.1465	.2819	.1909
	.775	-.2089	.1940	.1538	.1324	.0477
	.900	-.0225	-.0225	-.0823	-.0801	-.0563

ALPHA (3) = 4.025 BETA (4) = 4.244 MACH = .59494 0 = 591.36 P = 2386.7 RN/L = 4.8049

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

X/CV	.020	.2571	.1205	.1978	.1505	.1119
	-.025	-.3351	-.5216	-.3337	-.2221	-.4908
	.050	-.3075	-.4945	-.2847	-.1906	-.3945
	-.150	-.6554	-.3129	-.2124	-.2238	-.1504
	.300	-.2146	-.1763	-.0412	-.0120	.0502
	.520	.2903	.0677	.2009	.1962	.0140
	.685	-.2434	.2345	-.1601	.1320	-.1104
	.775	-.2354	.1231	.1088	.0680	.0835
	.900	-.0839	-.0839	-.1322	-.0833	-.1363

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148)

-140A/B/C/R ORB VERTICAL

ALPHA (3) = 4.031 BETA (5) = 8.294 MACH = .59494 O = 591.36 P = 2386.7 RN/L = 4.8049

SECTION 1: VERTICAL

Z, BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

Z, BV	X/CY	ALPHA (3)	BETA (5)	MACH	P	RN/L
.000	-.1543	-.5658		-.3572	-.2243	-.1920
.025	-.6254	-.9912		-.5922	-.3410	-.2903
.050	-.6373	-.8939		-.5815	-.3282	-.2102
.100	-.7797	-.9582		-.5595	-.3323	-.1960
.200	-.3719	-.2695		-.5490	-.3569	-.1953
.300	-.3609	-.1672		-.2410	-.2791	-.2161
.500	-.2823	-.1571		-.1373	-.2099	-.2450
.750	-.2642	-.1255		-.0292	-.1254	-.1925
1.0	-.1253	-.1253		-.0621	-.1557	-.2005

ALPHA (4) = 7.869 BETA (1) = -7.888 MACH = .59424 O = 590.06 P = 2387.2 RN/L = 4.7971

SECTION 1: VERTICAL

Z, BV	X/CY	ALPHA (4)	BETA (1)	MACH	P	RN/L
.000	-.1450	-.4939		-.6073	-.4109	-.3993
.025	-.3202	-.2450		-.4085	-.3763	-.2985
.050	-.3415	-.3110		-.3927	-.3683	-.2821
.100	-.2953	-.2093		-.3311	-.3003	-.1937
.200	-.1429	-.1429		-.3095	-.2422	-.1118
.500	-.1126	-.1581		-.3493	-.2595	-.0164
.750	-.2442	-.1455		-.3189	-.1790	-.1918
1.0	-.2333	-.2338		-.2332	-.1793	-.1892
.900	.0927	.0128		.2001	.0525	-.0437

ALPHA (4) = 7.985 BETA (2) = -3.859 MACH = .59424 O = 590.06 P = 2387.2 RN/L = 4.7971

SECTION 1: VERTICAL

Z, BV	X/CY	ALPHA (4)	BETA (2)	MACH	P	RN/L
.000	.2359	.0654		.0039	-.0312	-.1110
.025	.1652	.1655		.3229	.3159	.2682
.050	.1749	.1571		.2855	.2884	.2298
.100	.0770	.0957		.2264	.2186	.1447
.200	-.0139	.1245		.2416	.1846	.0776
.500	-.1579	.2132		.3202	.2461	-.0198
.750	-.2473	.3539		.2850	.1705	-.1629
1.0	-.2209	.2432		.1594	.1419	-.0516
.900	.054	-.0307		-.0274	-.0315	-.0506

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TABULATED PRESSURE DATA - OR14B (AMES 11-073-1)

AMES 11-073(0A14B) - 140A/B/C/R ORB VERTICAL

ALPHA (4) = 7.991 BETA (3) = .178 MACH = .59424 Q = 590.06 P = 2387.2 RNL = 4.7971

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .4098 .3316 .3754 .3495 .3003

.025 -.0637 -.2414 -.0496 -.0645 -.0007

.050 -.0209 -.0423 -.0795 .1004 -.0657

.150 -.0421 -.0674 .0919 .0934 .0643

.300 -.1135 -.0660 .1427 .1185 .0430

.520 -.2445 -.1519 .2713 .2230 -.0045

.685 -.3987 -.3054 -.1383 .2470 .1768 .1625 -.1581

.775 -.2001 -.1839 .1490 .1094 .1009 .0350 -.1522

.900 -.0116 -.0829 .0829 .0954 .0959 -.0660 -.1493

ALPHA (4) = 7.992 BETA (4) = 4.237 MACH = .59424 Q = 590.06 P = 2387.2 RNL = 4.7971

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .2452 .0850 .1437 .0969 .0295

.025 -.3536 .5427 .3506 .2241 .4604

.050 -.3169 .3537 .3029 .2569 .3575

.150 -.2395 -.3162 .2569 .2725 -.1028

.300 -.2402 -.1837 .0352 .0113 -.0297

.520 -.3100 .0771 .1968 .1963 .0110

.695 -.2290 .2321 .1529 .0915 .1756

.775 -.2171 .2563 .0848 .0801 .0426 .1329

.900 -.0745 .1426 .1000 .1185 .0388 .1109

ALPHA (4) = 7.969 BETA (5) = 8.293 MACH = .59424 Q = 590.06 P = 2387.2 RNL = 4.7971

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 -.1830 .6179 .4137 .2534 .2511

.025 -.5665 .9579 .6048 .3269 .2151

.050 -.8929 .5975 .6305 .3264 .1997

.150 -.8240 .9550 .5763 .3298 .1993

.300 -.3607 -.3571 .5882 .3506 .1999

.520 -.3447 -.0653 .2273 .3188 .2305

.685 -.2540 .1342 -.1678 -.0603 .2702 .2258

.775 -.2607 .0671 .0212 .0634 .1590 .2527

.900 -.1159 -.1881 -.0162 -.1204 .2035 .2061

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TABULATED PRESSURE DATA - 0A148 (AMES 11-073-1)

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AMES 11-07310A1481-140A/B/C/R ORB VERTICAL

SECTION 1: INVERTICAL

DEPENDENT VARIABLE CP

Z/B	X/CV	BETA (1) = 12.02	MACH = 7.846	P = 590.06	P = 2387.2	RNL = 4.7978
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250

ALPHA (1) = 11.893 BETA (1) = -3.839 MACH = .59422 0 = 590.06 P = 2387.2 RNL = 4.7978

SECTION 1: INVERTICAL

DEPENDENT VARIABLE CP

Z/B	X/CV	BETA (1) = 11.893	MACH = .59422	P = 590.06	P = 2387.2	RNL = 4.7978
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250

ALPHA (1) = 11.893 BETA (1) = -3.839 MACH = .59422 0 = 590.06 P = 2387.2 RNL = 4.7978

SECTION 1: INVERTICAL

DEPENDENT VARIABLE CP

Z/B	X/CV	BETA (1) = 11.893	MACH = .59422	P = 590.06	P = 2387.2	RNL = 4.7978
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250

ALPHA (1) = 11.893 BETA (1) = -3.839 MACH = .59422 0 = 590.06 P = 2387.2 RNL = 4.7978

SECTION 1: INVERTICAL

DEPENDENT VARIABLE CP

Z/B	X/CV	BETA (1) = 11.893	MACH = .59422	P = 590.06	P = 2387.2	RNL = 4.7978
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250
.1583	.3170	.4590	.6020	.6970	.8390	.9250

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\Delta_{\text{PHI}} + \Sigma_1 = 11.950$ $\text{BETA}_1 + \psi_1 = 4.247$ $\text{MACH} = .59422$ $Q = 590.06$ $P = 2387.2$ $RN/L = 4.7978$

SECTION 1: INERTIAL

Z:SV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X:CV .2730 .0495 .5617 .0937 .3620 .2399 .4426

.025 -.3463 -.5532 -.3232 -.2249 -.3269

.253 -.2983 -.5016 -.2871 -.3066 -.0528

.153 -.2317 -.3016 -.0206 .0258 -.0079

.399 -.2427 -.1907 .1642 .1852 -.0362

.520 -.3568 .6743 .1454 .0376 .1479 -.1537

.686 -.2112 .2353 .0793 .0512 .0222 -.1481

.718 -.2072 .1451 -.0555 -.1477 .1220 -.0592 -.1394

.300 $\Delta_{\text{PHI}} + \Sigma_1 = 11.973$ $\text{BETA}_1 + \psi_1 = 8.307$ $\text{MACH} = .59422$ $Q = 590.06$ $P = 2387.2$ $RN/L = 4.7978$

SECTION 1: INERTIAL

Z:SV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X:CV .1957 .6792 .5109 .6376 .6395 .3243 .2967

.025 -.7349 .9519 .6376 .6395 .3308 .2080

.050 .7652 .6452 .6395 .6395 .3312 .1963

.153 -.826 .9852 .6544 .7012 .3474 .1975

.323 -.4617 .3546 .1010 .1375 .3735 .2058

.423 -.4562 .1536 .0193 .0905 .3450 .2473

.535 -.3491 .0562 .0193 .0905 .3481 .2291

.775 -.3202 .1174 .2124 .1363 .2921 .2231

.200 $\Delta_{\text{PHI}} + \Sigma_1 = 11.973$.2148 .0256 .0537 .2364 .2265ORIGINAL PAGE TO
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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C/R ORB VERTICAL

ALPHA (1) = -3.359 BETA (3) = 4.272 MACH = .90057 Q = 600.66 P = 1058.0 RNL = 3.6340

SECTION : INVERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.020	.792	.341	.3494	.3052	.2475
.025	.1646	.6545	.4880	.1829	.1482
.030	.1112	.5075	.4814	.1733	.1326
.035	.1348	.3101	.4632	.1848	.1162
.040	.2267	.2388	.2567	.1872	.1503
.045	.2485	.2260	.2083	.1203	.1347
.050	.3240	.1903	.2071	.1240	.1167
.055	.2245	.0998	.1803	.1203	.3218
.060	.0231	.0231	.0245	.0460	.0822
			.2562	.1149	.3449
				.3702	

ALPHA (2) = .C+9 BETA (1) = -3.871 MACH = .90130 Q = 601.04 P = 1056.9 RNL = 3.6167

SECTION : INVERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.020	.4545	.2914	.3147	.4151	.3466
.025	.3164	.2173	.3588	.4002	.3396
.030	.3525	.2145	.3402	.3742	.3211
.035	.1587	.1293	.2850	.3015	.2300
.040	.0467	.0610	.2850	.2640	.1594
.045	.1131	.1550	.3517	.2939	.0126
.050	.2483	.3100	.2588	.2372	.2999
.055	.2317	.2384	.2340	.0150	.3176
.060	.0355	.0345	.0592	.0644	.1644
				.3129	

ALPHA (2) = .C52 BETA (2) = .177 MACH = .90130 Q = 601.04 P = 1056.9 RNL = 3.6167

SECTION : INVERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

.020	.5259	.4233	.5072	.5081	.4102
.025	.0254	.2514	.1931	.0469	.1272
.030	.1233	.3154	.0594	.0989	.0627
.035	.0164	.0593	.0247	.1418	.1133
.040	.1013	.0914	.1676	.1735	.0986
.045	.2495	.0767	.3302	.2677	.0026
.050	.2727	.2651	.1718	.3071	
.055	.2173	.1777	.2039	.1697	.2029
.060	.3250	.313	.2556	.0290	.1665
				.3248	

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REGULATED PRESSURE DATA - DA14B (AMES 11-073-1)

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AMES 11-073(DA14B) - INKA/B/C/R CFB VERTICAL		AMES 11-073(DA14B) - INKA/B/C/R CFB VERTICAL	
α	MACH = 4.242	α	MACH = .90040
BETA A = 31 =		0	= 600.32
CONVENTIONAL		P	= 1057.8
2-BE		RNL	= 3.5837
CP			
0.000	.1256	.0850	- .0052
.001	.1257	.0850	- .0052
.002	.1258	.0850	- .0052
.003	.1259	.0850	- .0052
.004	.1260	.0850	- .0052
.005	.1261	.0850	- .0052
.006	.1262	.0850	- .0052
.007	.1263	.0850	- .0052
.008	.1264	.0850	- .0052
.009	.1265	.0850	- .0052
.010	.1266	.0850	- .0052
.011	.1267	.0850	- .0052
.012	.1268	.0850	- .0052
.013	.1269	.0850	- .0052
.014	.1270	.0850	- .0052
.015	.1271	.0850	- .0052
.016	.1272	.0850	- .0052
.017	.1273	.0850	- .0052
.018	.1274	.0850	- .0052
.019	.1275	.0850	- .0052
.020	.1276	.0850	- .0052
.021	.1277	.0850	- .0052
.022	.1278	.0850	- .0052
.023	.1279	.0850	- .0052
.024	.1280	.0850	- .0052
.025	.1281	.0850	- .0052
.026	.1282	.0850	- .0052
.027	.1283	.0850	- .0052
.028	.1284	.0850	- .0052
.029	.1285	.0850	- .0052
.030	.1286	.0850	- .0052
.031	.1287	.0850	- .0052
.032	.1288	.0850	- .0052
.033	.1289	.0850	- .0052
.034	.1290	.0850	- .0052
.035	.1291	.0850	- .0052
.036	.1292	.0850	- .0052
.037	.1293	.0850	- .0052
.038	.1294	.0850	- .0052
.039	.1295	.0850	- .0052
.040	.1296	.0850	- .0052
.041	.1297	.0850	- .0052
.042	.1298	.0850	- .0052
.043	.1299	.0850	- .0052
.044	.1300	.0850	- .0052
.045	.1301	.0850	- .0052
.046	.1302	.0850	- .0052
.047	.1303	.0850	- .0052
.048	.1304	.0850	- .0052
.049	.1305	.0850	- .0052
.050	.1306	.0850	- .0052
.051	.1307	.0850	- .0052
.052	.1308	.0850	- .0052
.053	.1309	.0850	- .0052
.054	.1310	.0850	- .0052
.055	.1311	.0850	- .0052
.056	.1312	.0850	- .0052
.057	.1313	.0850	- .0052
.058	.1314	.0850	- .0052
.059	.1315	.0850	- .0052
.060	.1316	.0850	- .0052
.061	.1317	.0850	- .0052
.062	.1318	.0850	- .0052
.063	.1319	.0850	- .0052
.064	.1320	.0850	- .0052
.065	.1321	.0850	- .0052
.066	.1322	.0850	- .0052
.067	.1323	.0850	- .0052
.068	.1324	.0850	- .0052
.069	.1325	.0850	- .0052
.070	.1326	.0850	- .0052
.071	.1327	.0850	- .0052
.072	.1328	.0850	- .0052
.073	.1329	.0850	- .0052
.074	.1330	.0850	- .0052
.075	.1331	.0850	- .0052
.076	.1332	.0850	- .0052
.077	.1333	.0850	- .0052
.078	.1334	.0850	- .0052
.079	.1335	.0850	- .0052
.080	.1336	.0850	- .0052
.081	.1337	.0850	- .0052
.082	.1338	.0850	- .0052
.083	.1339	.0850	- .0052
.084	.1340	.0850	- .0052
.085	.1341	.0850	- .0052
.086	.1342	.0850	- .0052
.087	.1343	.0850	- .0052
.088	.1344	.0850	- .0052
.089	.1345	.0850	- .0052
.090	.1346	.0850	- .0052
.091	.1347	.0850	- .0052
.092	.1348	.0850	- .0052
.093	.1349	.0850	- .0052
.094	.1350	.0850	- .0052
.095	.1351	.0850	- .0052
.096	.1352	.0850	- .0052
.097	.1353	.0850	- .0052
.098	.1354	.0850	- .0052
.099	.1355	.0850	- .0052
.100	.1356	.0850	- .0052
.101	.1357	.0850	- .0052
.102	.1358	.0850	- .0052
.103	.1359	.0850	- .0052
.104	.1360	.0850	- .0052
.105	.1361	.0850	- .0052
.106	.1362	.0850	- .0052
.107	.1363	.0850	- .0052
.108	.1364	.0850	- .0052
.109	.1365	.0850	- .0052
.110	.1366	.0850	- .0052
.111	.1367	.0850	- .0052
.112	.1368	.0850	- .0052
.113	.1369	.0850	- .0052
.114	.1370	.0850	- .0052
.115	.1371	.0850	- .0052
.116	.1372	.0850	- .0052
.117	.1373	.0850	- .0052
.118	.1374	.0850	- .0052
.119	.1375	.0850	- .0052
.120	.1376	.0850	- .0052
.121	.1377	.0850	- .0052
.122	.1378	.0850	- .0052
.123	.1379	.0850	- .0052
.124	.1380	.0850	- .0052
.125	.1381	.0850	- .0052
.126	.1382	.0850	- .0052
.127	.1383	.0850	- .0052
.128	.1384	.0850	- .0052
.129	.1385	.0850	- .0052
.130	.1386	.0850	- .0052
.131	.1387	.0850	- .0052
.132	.1388	.0850	- .0052
.133	.1389	.0850	- .0052
.134	.1390	.0850	- .0052
.135	.1391	.0850	- .0052
.136	.1392	.0850	- .0052
.137	.1393	.0850	- .0052
.138	.1394	.0850	- .0052
.139	.1395	.0850	- .0052
.140	.1396	.0850	- .0052
.141	.1397	.0850	- .0052
.142	.1398	.0850	- .0052
.143	.1399	.0850	- .0052
.144	.1400	.0850	- .0052
.145	.1401	.0850	- .0052
.146	.1402	.0850	- .0052
.147	.1403	.0850	- .0052
.148	.1404	.0850	- .0052
.149	.1405	.0850	- .0052
.150	.1406	.0850	- .0052
.151	.1407	.0850	- .0052
.152	.1408	.0850	- .0052
.153	.1409	.0850	- .0052
.154	.1410	.0850	- .0052
.155	.1411	.0850	- .0052
.156	.1412	.0850	- .0052
.157	.1413	.0850	- .0052
.158	.1414	.0850	- .0052
.159	.1415	.0850	- .0052
.160	.1416	.0850	- .0052
.161	.1417	.0850	- .0052
.162	.1418	.0850	- .0052
.163	.1419	.0850	- .0052
.164	.1420	.0850	- .0052
.165	.1421	.0850	- .0052
.166	.1422	.0850	- .0052
.167	.1423	.0850	- .0052
.168	.1424	.0850	- .0052
.169	.1425	.0850	- .0052
.170	.1426	.0850	- .0052
.171	.1427	.0850	- .0052
.172	.1428	.0850	- .0052
.173	.1429	.0850	- .0052
.174	.1430	.0850	- .0052
.175	.1431	.0850	- .0052
.176	.1432	.0850	- .0052
.177	.1433	.0850	- .0052
.178	.1434	.0850	- .0052
.179	.1435	.0850	- .0052
.180	.1436	.0850	- .0052
.181	.1437	.0850	- .0052
.182	.1438	.0850	- .0052
.183	.1439	.0850	- .0052
.184	.1440	.0850	- .0052
.185	.1441	.0850	- .0052
.186	.1442	.0850	- .0052
.187	.1443	.0850	- .0052
.188	.1444	.0850	- .0052
.189	.1445	.0850	- .0052
.190	.1446	.0850	- .0052
.191	.1447	.0850	- .0052
.192	.1448	.0850	- .0052
.193	.1449	.0850	- .0052
.194	.1450	.0850	- .0052
.195	.1451	.0850	- .0052
.196	.1452	.0850	- .0052
.197	.1453	.0850	- .0052
.198	.1454	.0850	- .0052
.199	.1455	.0850	- .0052
.200	.1456	.0850	- .0052
.201	.1457	.0850	- .0052
.202	.1458	.0850	- .0052
.203	.1459	.0850	- .0052
.204	.1460	.0850	- .0052
.205	.1461	.0850	- .0052
.206	.1462	.0850	- .0052
.207	.1463	.0850	- .0052
.208	.1464	.0850	- .0052
.209	.1465	.0850	- .0052
.210	.1466	.0850	- .0052
.211	.1467	.0850	- .0052
.212	.1468	.0850	- .0052
.213	.1469	.0850	- .0052
.214	.1470	.0850	- .0052
.215	.1471	.0850	- .0052
.216	.1472	.0850	- .0052
.217	.1473	.0850	- .0052
.218	.1474	.0850	- .0052
.219	.1475	.0850	- .0052
.220	.1476	.0850	- .0052
.221	.1477	.0850	- .0052
.222	.1478	.0850	- .0052
.223	.1479	.0850	- .0052
.224	.1480	.0850	- .0052
.225	.1481	.0850	- .0052
.226	.1482	.0850	- .0052
.227	.1483	.0850	- .0052
.228	.1484	.0850	- .0052
.229	.1485	.0850	- .0052
.230	.1486	.0850	- .0052
.231	.1487	.0850	- .0052
.232	.1488	.0850	- .0052
.233	.1489	.0850	- .0052
.234	.1490	.0850	- .0052
.235	.1491	.0850	- .0052
.236	.1492	.0850	- .0052
.237	.1493	.0850	- .0052
.238	.1494	.0850	- .0052
.239	.1495	.0850	- .0052
.240	.1496	.0850	- .0052
.241	.1497	.0850	- .0052
.242	.1498	.0850	- .0052
.243	.1499	.0850	- .0052
.244	.1500	.0850	- .0052
.245	.1501	.0850	- .0052
.246	.1502	.0850	- .0052
.247	.1503	.0850	- .0052
.248	.1504	.0850	- .0052
.249	.1505	.0850	- .0052
.250	.1506	.0850	- .0052
.251			

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

SECTION (1) VERTICAL		SECTION (3) VERTICAL		SECTION (3) VERTICAL	
Z/BV	X/CV	Z/BV	X/CV	Z/BV	X/CV
.1550	.3170	.4550	.3345	.1129	.1129
.1550	.3170	.4550	.1557	.5976	.4740
.150	.3102	.3778	.0462	.4740	.4740
.300	.3035	.3259	.1129	.3259	.3259
.520	.4699	.0591	.0462	.0591	.0591
.685	.3126	.1042	.2263	.1042	.1042
.775	.2558	.0255	.0578	.0255	.0255
.900	.0710	.0784	.0784	.0710	.0710

AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL
MACH = .261 P = .89987 Q = .598.87 P = 1058.3 RNU = 3.5762
(XEBW67)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL

REFERENCE DATA

SREF	=	2590.0000 SQ.FT.	XMRP	=	1076.6800 IN. X0
LREF	=	.474.8000 IN.	YMRP	=	.0000 IN. Y0
EREF	=	935.0500 IN.	ZMRP	=	.375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) = -3.934 BETA (1) = -7.845 MACH = .59574

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.029	.0150	-.2299	-.2142	-.0162	-.0390
	.025	.4657	.4635	.5236	.4960	.4372
	.035	.4231	.3945	.4749	.4636	.3937
	.150	.2653	.2645	.3655	.3524	.2647
	.320	.1525	.1610	.3191	.2760	.1682
	.520	-.1100	.2035	.3481	.2749	.0214
	.655	-.2260	.2729	.1788	.2025	.1846
	.775	-.2494	.1729	.1789	.1573	.0505
	.900	-.0201	-.0562	-.0520	-.0534	-.1605

ALPHA (2) = -3.918 BETA (2) = -3.844 MACH = .59574

SECTION (1) VERTICAL

Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.029	.2694	.2508	.3185	.3756	.2781	
	.025	.3219	.2541	.3491	.3591	.3128	
	.050	-.3817	.2551	.3196	.3298	.2958	
	.150	.1160	.1446	.2477	.2434	.1884	
	.320	.3550	.0575	.2257	.2035	.1205	
	.520	-.1105	.1401	.3134	.2482	.0038	
	.685	-.2537	.2259	.1856	.2702	.2008	-.2026
	.775	-.2393	.1162	.1367	.1214	.1164	.0255
	.900	-.0578	-.0630	-.0633	-.0635	-.0805	-.2186

DEPENDENT VARIABLE CP

P = 593.04 RNL = 2387.2 RN/L = 4.8347

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(XEBVBB) (13 AUG 75)

PARAMETRIC DATA

RUDDER	=	.000	SPDBRK	=	55.000
BDFLAP	=	22.500	L-ELVN	=	-4.000
R-ELVN	=	-4.000	MACH	=	.600

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TASULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -14CA/B/C/R ORB VERTICAL							1XE8V68				
ALPHA (1) =	-3.895	BETA (3) =	.193	MACH =	.59574	Q =	.593.04	P =	2387.2	RNL =	4.8347
SECTION (1) VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV	.000	.5046	.4665	.5239	.4992	.4341					
	.025	-.0037	-.26C9	-.1918	-.0400	-.2288					
	.050	.1028	.0015	.0444	.0645	.0499					
	.150	.0357	-.0250	.0778	.0854	.0689					
	.300	-.0548	-.0517	.1173	.1156	.0517					
	.520	-.2414	.0745	.2542	.2064	.0104					
	.665	-.2589	.1791	-.1811	.2069	.1687	-.1976				
	.775	-.2434	.0656	.0824	.0771	.0702	.2106				
	.900	-.1572	-.1330	-.1299	-.1256	-.0975	-.1953				
ALPHA (1) =	-3.903	BETA (4) =	4.270	MACH =	.59574	Q =	.593.04	P =	2387.2	RNL =	4.8347
SECTION (1) VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV	.000	.3316	.2331	.2371	.1393	.0991					
	.025	-.2917	-.5548	-.4967	-.3152	-.8084					
	.050	-.4434	-.4454	-.3552	-.2791	.6525					
	.150	-.2069	-.3274	-.2311	-.2236	.1753					
	.300	-.1817	-.1939	-.0950	-.1173	.0864					
	.520	-.3077	-.0332	.0762	.0573	.0583					
	.685	-.2926	-.0991	-.1834	.1336	.0395	.2428				
	.775	-.2562	-.0017	.0303	.0127	.0586	.2487				
	.900	-.1755	-.1824	-.1938	-.1782	-.1159	.2138				
ALPHA (1) =	-3.916	BETA (5) =	8.339	MACH =	.59574	Q =	.593.04	P =	2387.2	RNL =	4.8347
SECTION (1) VERTICAL											
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250				
X/CV	.000	-.0615	-.4121	-.3059	-.3906	-.2442					
	.025	-.5731	-.9399	-.6366	-.6042	-.4748					
	.050	-.5776	-.7355	-.6338	-.5383	-.4328					
	.150	-.7545	-.7678	-.5660	-.5721	-.3826					
	.300	-.3152	-.4479	-.4982	-.5145	-.3409					
	.520	-.3653	-.1434	-.2358	-.3242	-.2885					
	.685	-.5355	-.2292	-.1800	-.1067	-.2448					
	.775	-.2742	-.0828	-.0037	-.1457	-.2078					
	.900	-.2529	-.2612	-.2313	-.2545	-.1653	-.2772				

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) -140A/B/C/R ORB VERTICAL (XEBV68)						
ALPHA (2) = .067	BETA (1) = -7.888	MACH = .59556	Q = .592.68	P = 2387.2	RN/L = 4.8372	
SECTION : 1) VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.000	-.0378	- .3039	-.2931	-.1038	-.0904
	.025	.4468	.4066	.4864	.4592	.3962
	.050	.3973	.3557	.4402	.4308	.3653
	.150	.2503	.2355	.3413	.3267	.2401
	.300	.1214	.1176	.2971	.2547	.1542
	.520	-.1255	.1532	.3224	.2576	.0310
	.635	-.2627	.2630	-.1641	.2507	.1227
	.775	-.1644	.1644	.1627	.1345	.1182
	.900	-.2590	-.0312	-.0781	-.0562	-.0297
ALPHA (2) = .076	BETA (2) = -3.950	MACH = .59556	Q = .592.68	P = 2387.2	RN/L = 4.8372	
SECTION : 1) VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.000	.3083	.1812	.2473	.2960	.1992
	.025	.2825	.2285	.3258	.3274	.2907
	.050	.2620	.2131	.2965	.3033	.2624
	.150	.1344	.1193	.2218	.2175	.1615
	.300	.3238	.3055	.2055	.1825	.0974
	.520	-.1937	.1306	.2811	.2426	.1036
	.635	-.2778	.2173	-.1529	.2145	.1734
	.775	-.2335	.1152	.1168	.1015	.0244
	.900	-.0542	-.0542	-.1041	-.0979	-.1668
ALPHA (2) = .078	BETA (3) =	MACH = .59556	Q = .592.68	P = 2387.2	RN/L = 4.8372	
SECTION : 1) VERTICAL						
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390 .9250
X/CV	.000	.4589	.4135	.4759	.4416	.3671
	.025	-.0381	-.2845	-.1976	-.0578	-.2224
	.050	.0554	-.3229	.0210	.0439	.0324
	.150	-.0555	-.0558	.0593	.0671	.0459
	.300	-.0216	-.0752	.0928	.0912	.0308
	.520	.2591	.2600	.2221	.1814	.0146
	.635	-.2391	.1537	-.1655	.1765	.1766
	.775	-.2344	.0562	.0687	.0503	.2038
	.900	-.11170	-.1473	-.1427	-.1356	-.0994

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

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AMES 11-073(DA148) -140A/B/C/R ORB VERTICAL

(XEBV68) (XEBV68)

ALPHA : 2) = .074 SETA (4) = 4.252 MACH = .59556 0 = 592.68 P = 2387.2 RN/L = 4.8372

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV -.1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.2852	.1426	.1797	.0685	.0032
.325	-.3462	-.5480	-.4680	-.3235	-.7581	
.350	-.2994	-.4868	-.3627	-.2861	-.6080	
.150	-.2438	-.3531	-.2572	-.1732	-.2803	
.200	-.2139	-.2108	-.1501	-.0579	-.0623	
.620	-.3180	-.0133	-.0714	-.0372	-.1981	
.655	-.2997	-.3958	-.1704	-.0799	-.0323	
.775	-.2521	-.0112	-.0070	-.0100	-.2002	
.900	-.1773	-.1976	-.1860	-.2004	-.0800	
ALPHA : 2) = .069 SETA (5) = 8.307 MACH = .59556 0 = 592.68 P = 2387.2 RN/L = 4.8372						
X/CV	.000	-.1088	-.5128	-.3953	-.4142	-.2996
.325	-.6022	-.1645	-.6798	-.5500	-.3920	
.350	-.6148	-.8797	-.6692	-.5717	-.3663	
.150	-.7980	-.9033	-.6+20	-.5169	-.3326	
.323	-.3579	-.4+19	-.5189	-.4600	-.3107	
.520	-.3824	-.1167	-.3767	-.3375	-.2562	
.655	-.306+	-.032	-.11732	-.2310	-.2792	
.775	-.2874	-.0567	-.0421	-.1795	-.2468	
.900	-.2196	-.2440	-.2133	-.2378	-.2027	
ALPHA : 3) = 4.022 SETA (1) = -7.901 MACH = .59554 0 = 594.20 P = 2386.1 RN/L = 4.8148						
X/CV	.000	-.0883	-.376+	-.3983	-.1808	-.1565
.325	-.4058	-.3630	-.4388	-.4133	-.3463	
.050	-.3554	-.3234	-.4058	-.3904	-.3223	
.150	-.2157	-.2064	-.3149	-.2965	-.2136	
.220	-.1006	-.1195	-.2796	-.2347	-.1261	
.520	-.1327	-.970	-.2355	-.2321	-.0119	
.635	-.2611	-.2659	-.1191	-.2213	-.1733	
.775	-.2199	-.671	-.1494	-.1222	-.0+13	
.910	-.0235	-.0828	-.0744	-.0663	-.0343	

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

X/CV	.000	-.0883	-.376+	-.3983	-.1808	-.1565
.325	-.4058	-.3630	-.4388	-.4133	-.3463	
.050	-.3554	-.3234	-.4058	-.3904	-.3223	
.150	-.2157	-.2064	-.3149	-.2965	-.2136	
.220	-.1006	-.1195	-.2796	-.2347	-.1261	
.520	-.1327	-.970	-.2355	-.2321	-.0119	
.635	-.2611	-.2659	-.1191	-.2213	-.1733	
.775	-.2199	-.671	-.1494	-.1222	-.0+13	
.910	-.0235	-.0828	-.0744	-.0663	-.0343	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C/R ORB VERTICAL
 SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CP
 .000 .2720 .1315 .1886 .2221 .1251
 .035 .2352 .1992 .2976 .2976 .2610
 .050 .2234 .1751 .2560 .2759 .2327
 .150 .0971 .0933 .1959 .1933 .1385
 .300 -.0075 .0205 .1801 .1607 .0733
 .420 -.2003 .1182 .2558 .2067 .0112
 .695 -.2656 .2116 -.1526 .1935 .1593 .1511
 .775 -.2348 .1139 .1077 .0852 .0824 .1499
 .850 -.0504 -.1155 -.0995 -.0689 -.0635 -.1358

ALPHA (3) = 4.025 BETA (2) = -3.862 MACH = .59644 0 = 594.20 P = 2386.1 RN/L = 4.8446
 SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CP
 .360 -.4284 .3673 .4252 .3870 .3038
 .025 -.0619 .2939 -.1798 -.0831 -.2276
 .050 -.0304 .0516 .0394 .0394 .0076
 .150 -.0583 .0615 .0445 .0445 .0290
 .250 -.1153 .0531 .0203 .0710 .0149
 .420 -.2684 .0529 .1748 .1552 .1224 .1527
 .695 -.2633 .0552 -.1610 .0304 -.0249 -.1594
 .775 -.2276 .0612 .0527 .0304 -.1579 -.1052 -.1692
 .850 -.1143 -.1157 -.1566 -.1566 -.1566 -.1566

ALPHA (3) = 4.027 BETA (4) = 4.243 MACH = .59644 0 = 594.20 P = 2386.1 RN/L = 4.8446
 SECTION 1 (VERTICAL) DEPENDENT VARIABLE CP
 Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CP
 .550 .2509 .0902 .1101 .0055 .0806
 .125 -.3734 -.5506 -.4546 -.3268 -.6734
 .050 -.3266 .5255 .3805 .2989 .5426
 .150 -.2763 .5572 .2951 .2985 .3610
 .350 -.2413 .1233 .1680 .2138 .0307
 .500 -.3208 .0181 .0841 .0759 .0644
 .685 -.2727 .0535 -.1628 .0530 .0757 .1698
 .775 -.2434 .0554 -.0079 .0048 .0046 .1820
 .850 .0000 -.1704 -.267 -.1701 -.1989 -.0585 -.2162

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL.

ALPHA (3) = .4.033 BETA (5) = 8.290 MACH = .59644 Q = 594.20 P = 2386.1 RN/L = 4.8446

SECTION 1: INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV DEPENDENT VARIABLE CP

.000	-.1677	-.5764	-.4665	-.4115	-.3303
.025	-.6540	-.0572	-.7594	-.4619	-.3220
.050	-.6770	-.9193	-.7218	-.4641	-.3039
.150	-.8389	-.10143	-.7114	-.4631	-.2747
.300	-.3030	-.4376	-.7027	-.4466	-.2612
.525	-.3923	-.1401	-.3636	-.3803	-.2398
.695	-.3101	-.0175	-.1724	-.3136	-.3249
.775	-.2740	-.0404	-.0724	-.0671	-.2365
.900	-.2200	-.2822	-.1200	-.2256	-.2436

ALPHA (4) = 7.582 BETA (1) = -7.890 MACH = .59642 Q = 594.33 P = 2386.8 RN/L = 4.8439

SECTION 1: INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV DEPENDENT VARIABLE CP

.000	-.1335	-.4503	-.4876	-.2747	-.2377
.025	.3703	.3234	.3968	.3615	.2934
.050	.3258	.2065	.3721	.3456	.2748
.150	.1933	.9228	.2958	.2638	.1760
.200	.0318	.033	.2555	.2060	.0951
.525	-.1416	.1772	.2723	.2022	.0202
.695	-.2567	.2569	.2363	.1350	-.1776
.775	-.2422	.1746	.1479	.1104	.0171
.900	-.0046	-.0699	-.0699	-.0671	-.1753

ALPHA (4) = 7.993 BETA (2) = -3.860 MACH = .59642 Q = 594.33 P = 2386.8 RN/L = 4.8439

SECTION 1: INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV DEPENDENT VARIABLE CP

.000	.2451	.0399	.1251	.1461	.0489
.225	.1819	.1557	.2713	.2682	.2215
.250	.1701	.1481	.2360	.2421	.2006
.150	.0591	.0517	.1767	.1687	.1097
.300	-.0354	.0259	.1621	.1319	.0438
.520	-.2079	.1120	.2294	.1722	-.0314
.695	-.2714	.2072	-.1509	.1606	.1244
.775	-.2325	.1183	-.0943	.0651	-.0097
.900	-.0541	-.1130	-.1152	-.1062	-.0733

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (deg) = 7.99; BETA (3) = .185 MACH = .59642 0 = 594.33 P = 2386.8 RNL = 4.8439
 SECTION 1: INVERTICAL DEPENDENT VARIABLE CP
 Z/BY .1590 .317C .4590 .6020 .6970 .8390 .9250

X/CV .4016 .3257 .3730 .3301 .224B
 .0735 -.3218 -.1880 -.1131 -.23 5
 .0034 -.0714 -.0076 .0242 -.0242
 .0571 -.0556 .0223 .0057
 .1332 -.1050 .0661 .0487 -.0051
 .2723 .0596 .1766 .1335 -.0549
 .5639 .1578 .1452 .1219 .0972 -.1908
 .6227 .0449 .0122 .0167 -.0294 -.1884
 .2159 -.1617 -.1655 -.1635 -.1162 -.1767

1XE8V681
 AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL
 DEPENDENT VARIABLE CP
 P = 2386.8 RNL = 4.8439

ALPHA (deg) = 7.992 BETA (4) = 4.234 MACH = .59642 0 = 594.33 P = 2386.8 RNL = 4.8439
 SECTION 1: INVERTICAL DEPENDENT VARIABLE CP
 Z/BY .1580 .317C .4590 .6020 .6970 .8390 .9250

X/CV .2313 .0491 .0651 .0625 .1566
 .3755 .1571 .1515 .3320 .5953
 .3234 .1575 .4015 .3098 .4882
 .2652 .1532 .3223 .3475 .3307
 .2532 .1232 .1412 .1975 .0414
 .3426 .1526 .0973 .0939 .0729
 .2516 .1535 .1533 .0395 .0941 .1953
 .2297 .1555 .0205 .0477 .0179 .2078
 .8630 .1614 .2227 .1864 .1942 .0952 .2160

1XE8V681
 AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL
 DEPENDENT VARIABLE CP
 P = 2386.8 RNL = 4.8439

ALPHA (deg) = 7.990 BETA (5) = 8.288 MACH = .59642 0 = 594.33 P = 2386.8 RNL = 4.8439
 SECTION 1: INVERTICAL DEPENDENT VARIABLE CP
 Z/BY .158C .317C .4590 .6020 .6970 .8390 .9250

X/CV .2097 .0242 .5591 .4328 .3866
 .6957 .1562 .7478 .4455 .2993
 .0265 .1562 .7554 .4448 .2875
 .7242 .0353 .7651 .4476 .2710
 .3673 .1153 .7737 .4553 .2583
 .3200 .1515 .2639 .4030 .2562
 .3335 .1515 .0659 .3512 .2491
 .2779 .1557 .0270 .3751 .3279
 .2435 .1566 .0875 .2158 .2475
 .2150 .1566 .2706 .2887 .2731 .2498

1XE8V681
 AMES 11-073(0A148) -140A/B/C/R ORB VERTICAL
 DEPENDENT VARIABLE CP
 P = 2386.8 RNL = 4.8439

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -14CA/B/C/R ORB VERTICAL

ALPHA (5) = 11.959 ZETA (1) = -7.852 MACH = .59656 Q = 594.57 P = 2386.7 RNL = 4.6e03

SECTION 1 INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV
 .000 -.1416 -.5462 -.5612 -.3519 -.3216
 .025 .2843 .3065 .3573 .3251 .2489
 .050 .2346 .2731 .3430 .3190 .2446
 .100 .0995 .1726 -.2754 .2405 .1510
 .150 .0207 .1014 .2372 .1824 .0753
 .200 -.1548 .1656 .2529 .1774 .0355
 .250 -.2497 .2826 -.1510 .2179 .1169
 .300 -.2534 .2307 .1410 .3363 .0927 .1671
 .350 .0167 -.3715 -.3670 -.0639 -.0331 .1755

ALPHA (5) = 11.978 ZETA (2) = -7.840 MACH = .59556 Q = 594.57 P = 2386.7 RNL = 4.8e03

SECTION 1 INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV
 .000 .2635 .0557 .0535 .0671 -.0125
 .025 .695 .1501 .1533 .2397 .1941
 .050 .1631 .1325 .2202 .2161 .1662
 .100 .0318 .2512 .1958 .1461 .0737
 .150 -.2640 -.0035 .1568 .1031 .0220
 .200 -.2385 .1182 -.2375 .1533 .0632
 .250 -.2707 .2184 -.1415 .1743 .1711
 .300 -.2363 .1352 .0952 .0518 .3335 .1779
 .350 -.0278 -.1105 -.1249 -.1139 -.1337 .1822

ALPHA (5) = 11.981 ZETA (3) = -.186 MACH = .59556 Q = 594.57 P = 2386.7 RNL = 4.3e03

SECTION 1 INVERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV
 .000 -.3563 .2923 .3290 .2803 .1953
 .025 -.0771 -.3075 .1845 .1250 .1250
 .050 -.0025 -.0823 -.0094 .0185 .0253
 .100 -.0702 -.1035 .0139 .0115 .0115
 .150 -.1488 -.1119 .1251 .0330 .0175
 .200 -.2827 .1662 .1549 .1125 .0629
 .250 -.2512 .1672 .1512 .1232 .0823
 .300 -.2227 .1671 .1556 .1323 .0553 .1911
 .350 -.1324 -.1706 -.1774 -.1720 -.1255 .1716

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(XE8V68)

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TABULATED PRESSURE DATA - C414B (AMES 11-073-1)

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AMES 11-07310A14B1 -14CA/B/C CRB VERTICAL

(XEBV69) (13 AUG 75)

REFERENCE DATA

ZREF	=	2598.0000 SC.FT.	XMPR	=	1076.6800 IN. X0
LREF	=	.97-.8000 IN.	YMPR	=	.0000 IN. Y0
BREF	=	.935.0680 IN.	ZMPR	=	.375.0000 IN. Z0
SCALE	=	.0300			

ALPHA (1) =	-3.989	BETA (1) =	-3.851	MACH = .83987	Q = 599.88	P = 1058.2	RNL = 3.6263
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP			

Z_EF	=	.1580	.3-70	.4590	.6020	.6970	.8390	.9250
------	---	-------	-------	-------	-------	-------	-------	-------

X/CY								
.000	-1.2+3	.3595	.4051	.4855	.4273			
.025	-1.2+3	.2933	.4025	.4250	.3655			
.050	-1.2+1	.2335	.3792	.4247	.3537			
.150	-1.2+0	.1957	.3206	.3886	.2619			
.250	-1.2-2	.1529	.3168	.2910	.1912			
.500	-1.2-3	.1539	.4273	.3134	.0437			
.650	-1.2-3	.1785	.1794	.3554	.2737			
.775	-1.2-2	.1781	.2839	.2515	.1539			
.900	-1.2-2	.1161	.0826	.0253	.1373			
A_ALPHA (1) =	-3.987	BETA (2) =	.189	MACH = .89987	Q = 599.88	P = 1058.3	RNL = 3.6263	
SECTION (1) VERTICAL				DEPENDENT VARIABLE CP				
Z_EF	=	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CY								
.000	.5768	.4973	.5736	.5659	.4729			
.025	.0773	-.18+6	-.480	-.3174	-.1148			
.050	.1932	.56+4	.1148	.1291	.3864			
.150	.10+3	.3122	.1295	.1729	.1451			
.300	-.0182	-.0233	.19+0	.2640	.1283			
.520	-.12+1	-.19+8	.3572	.2311	.2941			
.685	-.12+3	.2522	.1761	.3563	.3217			
.775	-.21+5	.11+3	.2328	.22+1	.1958			
.900	.3+2	.0658	.0552	-.0055	-.1557			

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TABULATED PRESSURE DATA - 0414B (AMES 11-073-1)

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AMES 11-073(0414B) - 140A/B/C ORB VERTICAL SECTION: 1 INERTIAL									
DEPENDENT VARIABLE CP X, CY									
Z, BY = .158	.3:70	.4530	.6020	.6970	.8390	.9250			
ALPHA = 21 = .008	BETA = 11 = -3.868	MACH = .89190	0	-	601.65	P =	1056.6	RNL =	3.6047
SECTION: 1 INERTIAL Z, BY = .158C <th data-kind="ghost"></th>									
ALPHA = 21 = .008	BETA = 12 = .177	MACH = .89190	0	-	601.65	P =	1056.6	RNL =	3.6047
SECTION: 1 INERTIAL Z, BY = .158C									

(XEBV69)

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TABULATED PRESSURE DATA - OAI4B (AXES 11-073-1)

AXES 11-073(0A14B) - 140A/B/C ORB VERTICAL
 ALPHAS (2) = .037 BETA (3) = 4.253 MACH = .90190 0 = 601.65 P = 1056.6 RN/L = 3.6047

SECTION : 1;VERTICAL

Z/EV .1580 .3170 .4590 .5020 .6970 .8390 .9250
 X/CY

X/CY	.2232	.2730	.2818	.2312	.1450
.025	-.2743	-.700+	-.4897	-.1902	-.1531
.050	-.1747	-.6397	-.4726	-.1843	-.1431
.150	-.1757	-.3562	-.4398	-.1907	-.1261
.350	-.2537	-.2609	-.2426	-.2068	-.1613
.550	-.3450	.0117	.2494	-.1255	-.2559
.650	-.2535	.2231	-.1595	.3039	-.3014
.750	-.2256	.124	.1579	.1650	-.0840
.850	-.0255	.0017	.0223	.0161	-.3557

ALPHAS (3) = 4.035 BETA (1) = -3.859 MACH = .90083 0 = 600.76 P = 1057.6 RN/L = 3.5915

SECTION : 1;VERTICAL

Z/EV .1580 .3170 .4590 .5020 .6970 .8390 .9250
 X/CY

X/CY	.3810	.2273	.2500	.3283	.2744
.025	.2611	.319	.3417	.3597	.3037
.050	.2531	.1767	.3127	.3354	.2827
.150	.1292	.0585	.2537	.2644	.1924
.350	.0259	.0239	.2530	.2270	.1246
.550	-.1573	.445	.3533	.2230	-.0143
.650	-.2473	.2078	-.1533	.3245	.2055
.775	-.2295	.2038	.2010	.2557	-.2640
.850	-.0569	.3763	.0265	.1684	-.0070

ALPHAS (3) = 4.032 BETA (2) = .179 MACH = .90083 0 = 600.78 P = 1057.6 RN/L = 3.5915

SECTION : 1;VERTICAL

Z/EV .1580 .3170 .4590 .5020 .6970 .8390 .9250
 X/CY

X/CY	.5046	.3682	.4417	.4455	.3263
.025	-.0501	-.2730	-.1593	-.0558	-.1194
.050	.0945	-.0442	.0670	.1149	.0454
.150	-.0695	-.0779	.0810	.1171	.0915
.350	-.1227	-.0398	.1422	.1445	.0678
.550	-.0610	.0712	.2834	.2249	-.0287
.650	-.2537	.2555	-.1473	.2468	.1645
.775	-.2213	.1452	.1793	.1549	-.2848
.850	-.0235	.2213	-.0214	.1322	-.0340

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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ALPHA (4) = 7.979 BETA (3) = 4.241 MACH = .89993 0 = 600.24 P = 1058.8 RN/L = 3.5857

SECTION 11 VERTICAL

Z/BV	X/CV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		.3291	.172		.1440		.0885	
		.2876	.665		.5074		.2358	
		.1672	-.6538		.5048		.2353	
		.1767	-.3865		.4715		.1893	
		.2877	-.2903		.2422		.2367	
		.3709	-.0271		.2135		.1233	
		.2732	.1457		.2305	.1580	.2824	
		.685	.0596		.1171	.1230	.1119	
		.775	-.0413		.0305	.0326	.2980	
		.900					.0539	

ALPHA (5) = 11.950 BETA (1) = -3.853 MACH = .90010 0 = 600.36 P = 1058.5 RN/L = 3.5793

SECTION 11 VERTICAL

Z/BV	X/CV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		.3497	.1591		.1283		.1750	
		.0229	.0:60		.2815		.3107	
		.0614	C404		.2488		.2886	
		.3298	-.0198		.2143		.2211	
		.1243	-.0553		.2304		.1350	
		.2389	.1020		.3156		.1790	
		.2963	.3096		.1901	.2872	.2273	
		.2956	.2226		.2347	.1681	.1253	
		.900	-.1193		.0737	.0042	.0529	

ALPHA (5) = 11.955 BETA (2) = .189 MACH = .90010 0 = 600.36 P = 1058.5 RN/L = 3.5793

SECTION 11 VERTICAL

Z/BV X/CV .1580 .3170 .4590 .6020 .6970 .8390 .9250

.300 .3831 .2430 .2898 -.1533 -.0533 .7505 -.3494 .2451

.025 -.0298 -.2898 -.1533 -.0533 -.0533 -.1962 -.0686 -.1459

.050 .0388 -.0388 -.1533 -.0533 -.0533 .0401 .0101 .0101

.150 -.0620 -.0620 -.1504 -.0504 -.0504 .0401 .0795 .0396

.250 -.1895 -.1895 -.1573 -.0573 -.0573 .0401 .1036 .0243

.520 -.2962 -.2962 .0395 .0395 .0395 .2461 .1778 .0745

.585 -.2784 -.2784 .2065 -.1798 -.1798 .2397 .1967 .1083 -.2901

.775 -.2399 -.2399 .1226 .1596 .1596 .1216 .0902 .0676 -.3012

.900 .0216 .0216 .0672 -.0365 -.0365 -.0911 -.2213 -.3137

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TABULATED PRESSURE DATA - OA148 : AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C ORB VERTICAL

ALPHA (5) = 11.948 BETA (3) = 4.260 MACH = .90010 Q = 600.36 P = * 1059.5 RNL = 3.5793

SECTION : 1 VERTICAL

DEPENDENT VARIABLE CP

Z, BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV	.000	.3455	.1587	.0780	-.0112	-.1246
.025	-.1247	-.6152	-.5776	-.2952	-.2515	
.050	-.0522	-.4966	-.5615	-.2924	-.2302	
.150	-.1325	-.3707	-.4746	-.3012	-.2240	
.300	-.2950	-.3370	-.1783	-.3078	-.2837	
.520	-.4134	-.0495	.1710	-.0922	-.2998	
.685	-.2986	-.1143	-.1926	.1395	-.0584	-.3183
.775	-.2587	.0327	.0735	.0749	.0797	-.3349
.900	-.05E+4	-.08C2	-.079+	-.0936	-.1497	-.3353

(XEBV69)

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TABULATED PRESSURE DATA - QAI48 (AMES 11-073-1)

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AMES 11-073(DA148) -140A/B/C ORB VERTICAL

1XEBV70 (13 AUG 75)

REFERENCE DATA

SREF =	2690.0000	SO.FT.	XMRP =	1076.6800	H. X0
LPEF =	.474-.9000	IN.	YMRP =	.0000	IN. Y0
B ² EF =	.936-.0580	IN.	ZMRP =	.375.0000	IN. Z0
SCALE =	.0300				

ALPHA (1) = -3.949 BETA (1) = -7.852 MACH = .59666 0 = 594.81 P = 2387.0 RN/L = 4.8517

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .0230 -.2383 -.2067 -.0443 -.0560

.025 .5005 .4559 .5297 .5033 .4412

.050 .4470 .4057 .4856 .4686 .4033

.150 .2976 .2754 .3785 .3566 .2691

.300 .1633 .1746 .3226 .2833 .1725

.520 -.0984 .2023 .3545 .2785 .0220

.695 -.2454 .2819 -.1876 .3092 .2809 .2176

.775 -.2419 .1803 .1875 .1696 .1592 .0599

.900 -.0122 -.0428 -.0348 -.0417 -.0457 -.1775

ALPHA (1) = -3.933 BETA (2) = -3.843 MACH = .59666 0 = 594.81 P = 2387.0 RN/L = 4.8517

SECTION (2) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .3674 .2584 .2832 .3881 .2897

.025 .3334 .2728 .3645 .3511 .3142

.050 .3085 .2558 .3275 .3287 .2942

.150 .1804 .1548 .2592 .2456 .1931

.320 .0660 .0724 .2302 .2074 .1233

.520 -.1671 .1434 .3150 .2637 .0145

.585 -.2565 .2347 -.1832 .2752 .2477 .2049 .1918

.775 -.2339 .1293 .1435 .1315 .1223 .0314 .2096

.900 -.0506 -.0790 -.0708 -.0755 -.0736 -.2143

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA (1) = -3.929		BETA (3) = .189		MACH = .59666	0 = 594.81	P = 2387.0	RNL = 4.8517
SECTION 1: VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
<i>X/CY</i>							
.000	.5095	.4740	.5385	.5060	.4420		
.025	.0060	-.2375	-.1682	-.0312	-.2025		
.050	.1153	.0191	.0563	.0715	.0554		
.150	.0519	-.0159	.0828	.0913	.0735		
.300	-.0503	-.0443	.1209	.1195	.0561		
.520	-.2339	-.0707	.2570	.2125	-.0014		
.585	-.2593	-.1864	.1882	.2323	.2101	-.1824	
.775	-.2275	.0700	.0909	.0843	.0798	.0106	-.2071
.900	-.1035	-.1272	-.1142	-.1142	-.0769	-.1774	
ALPHA (1) = -3.935 BETA (4) = 4.269 MACH = .59666 0 = 594.81 P = 2387.0 RNL = 4.8517							
SECTION 1: VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
<i>X/CY</i>							
.000	.3407	.2080	.2554	.0931	.1001		
.025	-.2744	-.5353	-.3768	-.4023	-.7414		
.050	-.2216	-.4341	-.3307	-.3462	-.6270		
.150	-.1250	-.3026	-.2200	-.1564	-.2218		
.300	-.1712	-.1842	-.0902	-.0581	-.0651		
.520	-.2998	.0612	.0924	.0603	-.0369		
.585	-.2865	.1069	-.1837	.0978	.1404	.0281	-.2086
.775	-.2508	.0090	.0385	-.009	.0246	-.0559	-.2004
.900	-.1655	-.1714	-.1721	-.1559	-.1130	-.1823	
ALPHA (1) = -3.949 SETA (5) = 8.334 MACH = .59666 0 = 594.81 P = 2387.0 RNL = 4.8517							
SECTION 1: VERTICAL				DEPENDENT VARIABLE CP			
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
<i>X/CY</i>							
.000	-.0502	-.4048	-.3120	-.3735	-.2499		
.025	-.5442	-.9520	-.6413	-.5249	-.4540		
.050	-.5604	-.7739	-.6141	-.5334	-.4327		
.150	-.7153	-.7781	-.5701	-.5251	-.3714		
.300	-.3029	-.4417	-.5206	-.4941	-.3306		
.620	-.3520	-.2356	-.3373	-.3331	-.2874		
.685	-.3032	-.3114	-.1806	-.2259	-.2634	-.2874	
.775	-.2695	-.3696	.0007	-.2008	-.1393	-.2168	-.2902
.900	-.2257	-.1970	-.2675	-.2548	-.2001	-.2768	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C ORB VERTICAL

(ME8V70)

ALPHA (2) = .049 BETA (1) = -.7888 MACH = .59628 0 = 593.97 P = 2386.4 RNL = 4.8452

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .056 BETA (2) = -3.864 MACH = .59628 0 = 593.97 P = 2386.4 RNL = 4.8452

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .058 BETA (3) = 180 MACH = .59828 0 = 593.97 P = 2386.4 RNL = 4.8452

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .059 BETA (4) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .060 BETA (5) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .061 BETA (6) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .062 BETA (7) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .063 BETA (8) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .064 BETA (9) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .065 BETA (10) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

ALPHA (2) = .066 BETA (11) = 104 MACH = .6040 - .0850 - .0840 - .0684 - .1658

SECTION 1) VERTICAL DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C ORB VERTICAL

ALPHA (2) = .056 BETA (4) = .4251 MACH = .59528 Q = 593.97 P = 2386.4 RN/L = 4.8452

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .2914 .1548 .1856 .0222 .0048
.3268 -.5432 -.4042 -.4164 -.7038
.2795 -.4749 -.3492 -.3754 -.5690
.2236 -.3302 -.2578 -.1643 -.3047
.150 -.1974 -.1934 -.1286 -.0963 -.0381
.300 -.2015 -.0115 .0888 .0496 .0252
.520 -.3058 -.1040 -.1701 .0848 .0926
.695 -.2813 -.0196 -.0066 -.0191 -.0343
.775 -.2463 -.096 -.1908 -.1702 -.1837 -.0682
.900 -.1654 -.0226 -.0226 -.0226 -.0226

ALPHA (2) = .051 BETA (5) = 8.306 MACH = .59528 Q = 593.97 P = 2386.4 RN/L = 4.8452

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .1130 .4903 .3839 .3627 .2819
.5993 .9936 .6721 .4776 .3544
.6000 .8338 .6716 .4809 .3355
.7574 .8307 .6322 .4840 .2951
.3432 .4159 .6016 .4769 .2724
.3625 .202 .355 .3429 .2367
.695 .0116 .2100 .2024 .2796
.775 .2653 .0451 .0318 .1463 .2459
.900 .2135 .2438 .1936 .2291 .1943

ALPHA (3) = .4000 BETA (1) = -7.898 MACH = .59578 Q = 593.03 P = 2386.8 RN/L = 4.8456

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .3752 .3537 .3976 .1678 .1621
.4126 .3570 .4112 .4154 .3489
.3658 .3302 .4081 .3905 .3194
.2242 .2213 .3181 .2945 .2140
.1051 .1286 .2758 .2280 .1282
.1260 .1854 .2999 .2322 .0134
.2537 .2622 .1617 .2251 .1788 .1144
.593 .1545 .2564 .1210 .0510 .1234
.775 .1674 .0226 -.0587 -.0322 .1073
.312 -.0226 -.0226 -.0693 -.0587 -.0322 -.1073

(XEB770)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -14DA/B/C ORB VERTICAL

ALPHA (3) = 4.002 BETA (2) = -3.861 MACH = .59578 Q = 593.03 P = 2386.8 RN/L = 4.8456

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.2710	.1264	.1677	.2325	.1326
.025	.2503	.2035	.3067	.3020	.2548
.050	.2264	.1814	.2670	.2798	.2348
.100	.1059	.0953	.2064	.1979	.1396
.200	.0010	.0295	.1856	.1606	.0809
.500	-.1901	-.1317	.2604	.2107	-.0591
.625	-.2618	-.2158	-.1618	.1972	.1665
.750	-.2252	-.1991	-.1119	.0932	-.1566
.900	-.0558	-.1055	-.0355	-.0821	-.0199
				-.0549	-.1635
					-.1413

ALPHA (3) = 4.000 BETA (3) = .182 MACH = .59578 Q = 593.03 P = 2386.8 RN/L = 4.8456

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.4322	.3718	.4270	.3896	.3066
.025	-.0569	-.2928	-.1594	-.0806	-.2088
.050	.0407	-.0431	.0208	.0523	.0168
.100	-.0223	-.0545	.0449	.0523	.0295
.200	-.1058	-.0799	.0935	.0757	.0184
.500	-.2591	-.0652	.2057	.1630	-.0298
.685	-.2570	-.1677	-.1614	.1522	.1266
.775	-.2497	.0552	.0624	.0392	-.1793
.900	-.1555	-.1534	-.1454	-.1376	-.0932
					-.1743

ALPHA (3) = 4.002 BETA (4) = 4.239 MACH = .59578 Q = 593.03 P = 2386.8 RN/L = 4.8456

SECTION 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.000	.2543	.0996	.1201	.0396	.0775
.025	-.3457	-.5387	-.4259	-.4089	-.6364
.050	-.3091	-.5119	-.3713	-.4011	-.5037
.100	-.2590	-.3433	-.2344	-.1964	-.3579
.200	-.2270	-.2093	-.1551	-.1695	-.0168
.500	-.3158	-.0181	.0929	.0585	-.0418
.685	-.2612	-.1111	-.1670	.0621	.0584
.775	-.2262	.0352	.0021	.0018	.1530
.900	-.1559	-.2032	-.1200	-.1732	-.1712
				-.0477	-.1823

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(OA148) - 140A/B/C ORB VERTICAL

(XE8V70) DEPENDENT VARIABLE CP

ALPHA (3) = 4.009 BETA (5) = 8.292 MACH = .59578 Q = 593.03 P = 2386.8 RN/L = 4.8456

SECTION 1: VERTICAL

Z/BV .1580 .3170 .4590 .5020 .6970 .8390 .9250

X/CV .000 -.1631 -.5800 -.4715 -.3913 -.3335
.025 -.6325 -.1.C433 -.7026 -.4471 -.3170
.050 -.6499 -.6971 -.7066 -.4500 -.2878
.150 -.8143 -.9953 -.6839 -.4547 -.2760
.200 -.3705 -.4057 -.6856 -.4637 -.2593
.250 -.3200 -.1312 -.3313 -.3750 -.2312
.300 -.3013 -.C324 -.1784 -.2921 -.3250 -.2223
.350 -.2598 -.5335 -.0711 -.2287 -.2707 -.2256
.400 -.1550 -.2736 -.1160 -.2217 -.2270 -.2220

ALPHA (4) = 7.945 BETA (1) = -7.890 MACH = .59630 Q = 593.97 P = 2386.4 RN/L = 4.8482

SECTION 1: VERTICAL

Z/BV .1580 .3170 .4590 .5020 .6970 .8390 .9250

X/CV .000 -.1317 -.4594 -.4843 -.2496 -.2496
.025 -.3792 -.3384 -.3946 -.3667 -.2915
.050 -.3276 -.3017 -.3700 -.3509 -.2753
.150 -.2019 -.1990 -.2904 -.2619 -.1775
.300 -.3897 -.135 -.2571 -.2075 -.0951
.500 -.1365 -.1841 -.2713 -.2042 -.0186
.625 -.2564 -.2628 -.2340 -.2040 -.1404 -.1547
.775 -.2519 -.1784 -.1470 -.1203 -.1090 -.0270 -.1592
.900 .0013 -.3606 -.0587 -.0514 -.0568 -.1684

ALPHA (4) = 7.955 BETA (2) = -3.850 MACH = .59630 Q = 593.97 P = 2386.4 RN/L = 4.8482

SECTION 1: VERTICAL

Z/BV .1580 .3170 .4590 .5020 .6970 .8390 .9250

X/CV .000 -.2469 -.0770 -.1130 -.1604 -.0692
.025 -.1906 -.1794 -.2796 -.2687 -.2204
.050 -.1778 -.1568 -.2397 -.2454 -.1992
.150 -.0635 -.0118 -.1845 -.1729 -.1109
.300 -.0253 -.0033 -.1729 -.1373 -.0529
.625 -.1973 -.1205 -.2357 -.1828 -.0311
.685 -.2537 -.2132 -.1653 -.2010 -.1677 -.1552
.775 -.2340 -.1273 -.1064 -.0779 -.0750 -.0040 -.1630
.900 -.1543 -.1041 -.0993 -.0970 -.0970 -.0590 -.1705

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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ALPHA = 51 = 11.925 BETA (1) = -7.848 MACH = .59584 0 = 593.15 P = 2386.7 RNL = 4.8434

SECTION 1 INERTIAL

Z/B: .1560 .3170 .4590 .6020 .6970 .8390 .9250

A/CY

Z/B	.000	-.1625	.0492	.0511	.0930	-.0066
	.025	-.2984	.1555	.2517	.2464	.1903
	.050	.2466	.1468	.2230	.2234	.1669
	.100	-.1165	.0591	.1700	.1513	.0830
	.150	.0510	.0624	.1501	.1211	.0245
	.200	-.2234	.1192	.2149	.1568	.0556
	.250	-.2733	.2282	-.1491	.1433	.1296
	.300	-.2274	.1451	.1543	.0495	.0114
	.350	-.0633	-.0633	-.1148	-.106	-.0955

ALPHA = 51 = 11.925 BETA (2) = -3.85; MACH = .59584 0 = 593.15 P = 2386.7 RNL = 4.8434

SECTION 1 INERTIAL

Z/B: .1532 .3173 .4590 .6020 .6970 .8390 .9250

A/CY

Z/B	.000	.0622	.2476	.0476	.0829	-.0146
	.025	-.1695	.1618	.2619	.2434	.1971
	.050	.1753	.1437	.2282	.2251	.1725
	.100	-.0613	.0827	.1718	.1533	.0865
	.150	-.0519	.0502	.1532	.1169	.0246
	.200	-.2314	.1132	.2152	.1336	.0588
	.250	-.2769	.2267	-.1550	.1459	.1047
	.300	-.2356	.1457	.1026	.0523	.0277
	.350	-.0153	-.0128	-.1115	-.1122	-.1990

ALPHA = 51 = 11.925 BETA (3) = .192 MACH = .59584 0 = 593.15 P = 2386.7 RNL = 4.8434

SECTION 1 INERTIAL

Z/B: .000 .3173 .4590 .6020 .6970 .8390 .9250

A/CY

Z/B	.000	.0622	.2476	.0476	.0829	-.0146
	.025	-.1695	.1618	.2619	.2434	.1971
	.050	.1753	.1437	.2282	.2251	.1725
	.100	-.0613	.0827	.1718	.1533	.0865
	.150	-.0519	.0502	.1532	.1169	.0246
	.200	-.2314	.1132	.2152	.1336	.0588
	.250	-.2769	.2267	-.1550	.1459	.1047
	.300	-.2356	.1457	.1026	.0523	.0277
	.350	-.0153	-.0128	-.1115	-.1122	-.1990

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TABULATED PRESSURE DATA - CAA48 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/C ORB VERTICAL

ALPHA (5) = 11.942 BETA (4) = 4.245 MACH = .59584 Q = 593.15 P = 2386.7 RN/L = 4.8434

SECTION (1) EPTICAL

Z_BV .1550 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .020 .2692 .0316 -.0002 -.1466 -.2236

.025 -.3356 -.5597 -.4518 -.3980 -.4979

.030 -.3059 -.5595 -.4011 -.4039 -.4269

.152 -.2016 -.3196 -.3796 -.2899 -.2356

.200 -.2570 -.2220 -.1192 -.2399 -.0684

.125 -.3322 -.0153 .0831 .0163 .0871

.165 -.2335 -.1025 -.1599 .0193 -.0616

.175 -.2583 -.3153 -.0193 -.0191 -.0309

.950 -.1407 -.2052 -.2052 -.1707 -.1971

-.2154 -.2154 -.2154 -.2154 -.2154

A_PHA (5) = 11.935 BETA (5) = 8.309 MACH = .59584 Q = 593.15 P = 2386.7 RN/L = 4.8434

SECTION (1) EPTICAL

Z_BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .020 -.2392 -.6742 -.6316 -.4964 -.4551

.025 -.7539 -.0014 -.7443 -.4651 -.2996

.030 -.7950 -.9305 -.7622 -.4616 -.2883

.152 -.4947 -.0115 -.7809 -.4911 -.2958

.200 -.4524 -.4200 -.6232 -.5201 -.2939

.125 -.7555 -.3356 -.1659 -.3930 -.2918

.655 -.3584 -.3225 -.1759 -.0121 -.3751

.775 -.3423 -.0011 -.0995 .0350 -.1952

-.3359 -.2697 -.2619 -.2772

.500 -.164 -.2750 -.1242 -.1112 -.2619

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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

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AMES 11-073(DAT48) - 140A/B/C ORB VERTICAL

(XEBV71) 113 AUG 75 1

REFERENCE DATA

SPEC	2590.000 SG.FT.	XRP	1076.680 IN. X0
PREF	.474.615 IN.	YRP	.0000 IN. Y0
ZREF	.355.485 IN.	ZRP	.375.000 IN. Z0
SGF/E	.0200		

A-FHA (1) = -3.945 BETA (1) = -3.657 MACH = 1.3971 0 = 600.47 P = 439.47 RNL = 2.9096

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/B₁ .1590 .5170 .4590 .6020 .6970 .8390 .9250

X/C ₁	.7234	.5753	.6478	.6766	.7032
.026	.6126	.5210	.4698	.4993	.5162
.035	.6301	.5227	.4621	.4878	.5221
.045	.5292	.4231	.3904	.4717	.4932
.055	.3892	.3314	.3269	.4957	.4578
.065	.2294	.2084	.5123	.5832	.3255
.075	.1234	.2798	.5135	.5097	.5576
.085	.1533	.1577	.3726	.4417	.4636
.095	.3011	.3011	.3785	.3756	.3921

A-FHA (1) = -3.945 BETA (2) = -180 MACH = 1.3971 0 = 600.47 P = 439.47 RNL = 2.9096

SECTION 1 : VERTICAL

DEPENDENT VARIABLE CP

Z/B₁ .1590 .5170 .4590 .5020 .6970 .8390 .9250

X/C ₁	.8372	.7453	.7059	.6907	.6496
.026	.2777	.1713	.0449	.0081	-.1190
.035	.4631	.3449	.1005	.0494	-.3859
.045	.2717	.2717	.2243	.2409	.2527
.055	.2612	.2612	.1982	.3205	.3887
.065	.1263	.1263	.3785	.5301	.3149
.075	.1563	.1563	.4177	.4455	.5123
.085	.2701	.2701	.3495	.3994	.3538
.095	.2930	.2930	.1959	.3227	.1785

PARAMETRIC DATA

RUDDER	-5.000	SPDRK	55.000
BDFLAP	16.300	L-ELVN	-10.000
R-ELVN	-10.000	MACH	.4000

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TABULATED PRESSURE DATA - CA14B (AMES 11-073-1)

A_PHA (1) = -3.346 BETA (3) = 4.272 MACH = 1.3971 Q = 600.47 P = 439.47 RNU/L = 2.9096
 SECTION 1: VERTICAL

Z_BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

* /CV
 1.00 .7562 .6699 .6154 .5259 .38C9
 .025 .9813 -.0748 -.2948 -.4933 -.48C9
 .050 .1265 -.0826 -.3146 -.4840 -.4738
 .075 .2055 .0228 -.0792 -.3690 -.4485
 .100 .2108 .0861 -.0057 .0873 -.0068
 .125 .0559 .0128 -.1597 .3593 .2260
 .150 .1353 -.1124 .2501 .2741 .3972 -.1744
 .175 .3153 .047 .1912 .2463 .2933 -.1808
 .200 .3260 .1129 .2053 .2330 .1352 -.2475

A_PHA (2) = -.016 BETA (1) = -3.873 MACH = 1.3971 Q = 600.47 P = 439.47 RNU/L = 2.9098
 SECTION 1: VERTICAL

Z_BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

* /CV
 1.00 .7583 .5224 .5727 .5622 .5978
 .025 .6869 .4416 .3912 .3954 .4241
 .050 .0656 .1457 .3902 .3931 .4334
 .075 .1800 .2122 .3223 .3570 .3987
 .100 .3120 .1835 .2879 .4194 .3904
 .125 .3150 .1858 .4423 .5325 .2955
 .150 .3175 .1815 .4363 .4432 .5003 .1753
 .175 .3265 .1772 .2992 .4064 .3538 -.1813
 .200 .3333 .2233 .3137 .3166 .1842 -.2852

A_PHA (2) = .022 BETA (2) = .180 MACH = 1.3971 Q = 600.47 P = 439.47 RNU/L = 2.9098
 SECTION 1: VERTICAL

Z_BY .1580 .3170 .4590 .6020 .6970 .8390 .9250
 * /CV
 1.00 .7514 .5755 .6231 .5724 .5739
 .025 .6967 .1522 -.0190 -.0288 -.1207
 .050 .1365 .2249 .0635 -.0074 -.0731
 .075 .1582 .2159 .1725 -.1714 .1819
 .100 .1512 .1512 .1424 .1898 .2937
 .125 .1682 .1722 .2257 .4555 .2777
 .150 .1735 .11324 .3436 .3679 .4515 -.1811
 .175 .1835 .1253 .1994 .2831 .3245 .3176 -.1830
 .200 .1917 .1291 .2215 .2493 .1528 -.2520

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AMES 11-073(CA14B) -140A/B/C ORB VERTICAL

1XEBV71)

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TRANSLATED PRESSURE DATA - CH48 (AMES 11-073-1)

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\alpha_{\text{PH4}} : \beta_1 = 3.955 \quad \beta_{\text{TA}} : (3) = 4.242 \quad \text{MACH} = 1.3961 \quad \alpha = 600.56 \quad P = 440.18 \quad RN/L = 2.9092$

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 x/C_V

x/C_V	.000	.5920	.5441	.4558	.3729	.3084	.2683
.025	-.1237	-.1582	-.1429	-.3860	-.1518	-.4813	-.5665
.050	-.0217	-.0183	-.0338	-.0895	-.0602	-.3539	-.4337
.100	-.0975	-.0180	-.0169	-.1390	-.1738	-.0419	-.0768
.150	-.0752	-.1000	-.0602	-.1515	-.1552	.2166	-.1241
.200	-.3857	-.0169	-.1503	-.1390	-.1519	.2692	-.2236
.250	-.3898	-.0645	-.0515	-.0532	-.0971	.1968	-.2431
.300	-.1255	-.1255	-.0038			.0612	-.3050

$\alpha_{\text{PH4}} : (4) = 7.997 \quad \beta_{\text{TA}} : (1) = -3.873 \quad \text{MACH} = 1.3969 \quad \alpha = 600.27 \quad P = 439.47 \quad RN/L = 2.9090$

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 x/C_V

x/C_V	.000	.5956	.4844	.4268	.3792	.3697
.025	.2635	.2346	.2426	.2547	.2384	
.050	.4022	.3037	.2435	.2464	.2541	
.100	.2651	.2157	.1857	.1957	.2272	
.150	.1540	.1254	.1426	.2461	.2514	
.200	.0391	.0367	.0352	.4359	.1717	
.250	-.4078	.1330	-.1685	.3076	.3211	.3520
.300	-.4090	-.0703	-.1750	.2330	.2652	.2273
.350	-.0107	.0107	.1235	.1666	.2131	.2525
.400					.1239	.3408

$\alpha_{\text{PH4}} : (4) = 7.995 \quad \beta_{\text{TA}} : (2) = .177 \quad \text{MACH} = 1.3969 \quad \alpha = 600.27 \quad P = 439.47 \quad RN/L = 2.9090$

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 x/C_V

x/C_V	.000	.6323	.5249	.4406	.3772	.3236
.025	.1273	.0404	-.0819	-.0931	-.1402	
.050	.3503	.2128	-.0223	-.1002	-.0943	
.100	.2943	.1135	.0593	.0529	.0479	
.150	.1138	.0337	.0294	.0422	.0854	
.200	-.0399	-.0516	-.1718	.2321	.2891	.1553
.250	-.4316	.0411	-.1625	.2077	.2864	-.2341
.300	-.4017	-.0135	.0933	.1443	.1790	.2047
.350		-.0259	.0274	.0954	.1227	.0768
.400						-.3358

(XE871)

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TABULATED PRESSURE DATA - DA148 (AMES 11-073-1)

ALPHA (5) = 11.967 BETA (3) = 4.251 MACH = 1.3964 Q = 600.16 P = 439.71 RNL = 2.9137
 AMES 11-073(DA148) - 140A/B/C ORB VERTICAL (XEBV71)

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .6185 .4725 .3124 .2238 .1748
 .025 .1047 -.1528 -.3772 -.4629 -.5337
 .050 .1786 -.1387 -.4051 -.4632 -.5306
 .150 .2276 -.0259 -.1678 -.2893 -.3826
 .300 .0456 -.0762 -.1366 -.1483 -.1255
 .520 -.1447 -.1687 -.0142 .0858 .0220
 .685 -.4279 -.1044 -.1728 -.0520 .0272 .2476
 .775 -.3981 -.1399 -.0461 .0165 .0272 .3093
 .900 -.1990 -.0940 -.0259 -.0009 -.0041 .3661

ALPHA (6) = 15.903 BETA (1) = -3.840 MACH = 1.3960 Q = 600.45 P = 440.18 RNL = 2.9185
 AMES 11-073(DA148) - 140A/B/C ORB VERTICAL (XEBV71)

Z/BV .1560 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7695 .5176 .3315 .2427 .2278
 .025 -.2161 .1261 .1499 .1513 .1344
 .050 -.0700 .2651 .1501 .1402 .1408
 .150 .2244 .1139 .0880 .0919 .0930
 .300 -.2053 -.0159 .0445 .0988 .1415
 .520 -.1055 -.1031 .1720 .3624 .1056
 .685 -.4185 -.0754 -.1643 .2534 .2635 .2577
 .775 -.3947 .0506 .1585 .1868 .1880 .2791
 .900 -.0079 .1113 .1416 .1528 .0923 .3649

ALPHA (6) = 15.917 BETA (2) = .180 MACH = 1.3960 Q = 600.45 P = 440.18 RNL = 2.9185
 AMES 11-073(DA148) - 140A/B/C ORB VERTICAL (XEBV71)

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV .000 .7023 .4997 .3309 .2455 .1985
 .025 .0932 -.0149 -.1538 -.1497 -.1941
 .050 .2928 .1543 -.0848 -.1519 -.1411
 .150 .2753 .0596 -.0220 -.0298 -.0370
 .300 .0749 -.0332 -.0410 -.0455 -.0370
 .520 -.1161 -.1199 .0742 .1753 .0508
 .685 -.4459 -.0170 -.1732 .1375 .1660 .2814
 .775 -.4097 -.0630 .0217 .0735 .1077 .3073
 .902 -.1253 -.0242 .0278 .0423 .0196 .3627

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TABULATED PRESSURE DATA - OAI14B (AMES 11-073-1)

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SECTION / 1) VERTICAL		AMES 11-073(OA14B) -140A/B/C		ORB VERTICAL	(XEBV71)		
A-B4 : 61 =	15.910	BETA (3) =	4.280	MACH = 1.3960	Q = 600.45	P = 440.18	RN/L = 2.9185
X/CV	.7629	.5301	.2856	.3811	.1634	.1319	
Z/BV	.1580	.3170	.4590	.6020	.6970	.8390	.9250
X/CV	.020	.1366	-.1609	-.4059	-.4593	-.5162	
	.023	.2692	-.1149	-.1846	-.4626	-.5207	
	.053	.2821	-.0081	-.1444	-.2692	-.3163	
	.150	.0722	-.0791	-.0338	-.1663	-.1704	
	.300	.1425	-.1733	.0421	.0390	-.0028	
	.620	.4583	-.0991	-.1838	.0852	-.2603	
	.695	.4145	-.1323	-.0576	.0640	-.3141	
	.775	.2043	-.2043	-.1057	-.0474	-.0197	-.3820

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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AMES 11-073(0A148) -140A/B/C ORB VERTICAL

REFERENCE DATA

ZREF =	2500.0000	SC.FT.	XRP =	1076.6800	I.N. X0
LREF =	.474	2100 IN.	YRP =	.0000	I.N. Y0
WREF =	.935	.0520 IN.	ZRP =	.375.0000	I.N. Z0
SCALE =	.0400				

ALPHA (1) = -3.944 BETA (1) = -3.854 MACH = 1.2471 Q = 599.40 P = 550.63 RNL = 3.0068

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .7691 .6280 .6056 .6916 .6828

.025 .5974 .4592 .4271 .5439 .5221

.050 .6125 .4628 .4155 .5377 .5233

.075 .4859 .3564 .3454 .4953 .4702

.100 .3324 .2725 .3376 .4819 .4272

.125 .1615 .1434 .5284 .5403 .2398

.150 .3563 .2292 -.1141 .4867 .4857

.175 .3117 .2273 .3980 .4333 .4286

.200 .2278 .3124 .3335 .3123 .3034

ALPHA (1) = -3.937 BETA (2) = .190 MACH = 1.2471 Q = 599.40 P = 550.63 RNL = 3.0068

SECTION (1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .000 .8161 .6971 .6632 .6775 .5614

.025 .2777 .0868 -.0309 -.1369 -.0707

.050 .4427 .2988 .0524 -.0355 -.2351

.100 .3803 .2155 .1686 .2172 .3040

.150 .2250 .1155 .1440 .3387 .3358

.200 .0615 .3453 .3802 .4728 .2213

.250 .655 .4359 .4557 .4129 .2751

.300 .775 .3777 .0560 .3263 .3554 .2572 .2515

.350 .930 .0113 .1746 .2514 .2557 .0729 .3178

PARAMETRIC DATA

RUDDER =	-5.000	SPDBRK = 55.000
BDFLAP =	16.300	L-ELVN = -10.000
R-ELVN =	-10.000	MACH = 1.250

(XEBVT2) (13 AUG 75)

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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$\alpha_{\text{PHA}} (1) = -3.943 \quad \beta_{\text{ETA}} (3) = 4.266 \quad \text{MACH} = 1.2471 \quad 0 = 599.40 \quad P = 550.63 \quad RNL = 3.0058$

SECTION 1 INVERTICAL

Z BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

α_{PHA}	β_{ETA}	γ	MACH	P	RNL
-3.943	4.266	1.2471	599.40	550.63	3.0058
.025	.0784	-1.653	.5815	.4365	.2987
.050	.1125	-1.552	.3983	-.5473	-.4545
.150	.1937	-.0340	.3959	-.5473	-.4383
.300	.1425	.0218	-.1043	-.4941	-.3838
.520	-.2255	-.0532	-.0509	-.1145	-.2329
.665	-.4804	-.0372	-.1007	.1437	.2057
.775	-.4416	-.0155	.1452	.2413	.3665
.920	-.3770	-.0560	.0560	.2457	.1604

 $\alpha_{\text{PHA}} (2) = -.045 \quad \beta_{\text{ETA}} (1) = -3.865 \quad \text{MACH} = 1.2470 \quad Q = 599.89 \quad P = 551.11 \quad RNL = 3.0108$

SECTION 1 INVERTICAL

Z BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

α_{PHA}	β_{ETA}	γ	MACH	P	RNL
-.020	.5299	.5550	.5247	.5576	.5844
.025	.5172	.3665	.3377	.3364	.4074
.050	.5259	.3715	.3331	.3977	.4114
.150	.4131	.2320	.2535	.3748	.3709
.300	.2655	.1945	.2149	.3841	.3474
.520	.0502	.0595	.4095	.4723	.1994
.665	-.4430	.1546	.4034	.4001	.4446
.775	-.3579	.0214	.2660	.3272	.2796
.920	-.3554	.0554	.2002	.2933	.2724

 $\alpha_{\text{PHA}} (2) = .053 \quad \beta_{\text{ETA}} (2) = .176 \quad \text{MACH} = 1.2470 \quad Q = 599.89 \quad P = 551.11 \quad RNL = 3.0108$

SECTION 1 INVERTICAL

Z BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CV

α_{PHA}	β_{ETA}	γ	MACH	P	RNL
-.229	.7603	.6248	.5842	.5842	.4932
.025	.2077	.0333	-.0739	-.1180	-.2412
.150	.2558	.2378	.0339	-.0354	-.1651
.300	.1587	.1550	.1054	.1244	.2082
.520	.0037	-.0150	.0787	.2573	.2741
.665	-.3951	-.3724	-.1194	.2701	.4154
.775	-.4206	-.0115	-.1495	.3089	.3351
.920	-.3544	-.0310	-.0818	.2418	.3862

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TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

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$\Delta \text{CPA} (\text{4}) = 7.943 \quad \text{BETA} (\text{3}) = 4.236 \quad \text{MACH} = 1.2470 \quad \text{O} = 599.90 \quad \text{P} = 551.11 \quad \text{RNL} = 3.0127$

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6409 .4645 .3409 .2583 .1029

.0225 .0811 .2390 .4739 .6284

.053 .1329 .2130 .5046 .5907

.150 .1653 .0767 .2254 .6336

.300 .0209 .1220 .1878 .5797

.520 .1916 .2140 .0013 .3704

.695 .1282 .1544 .0731 .1706

.775 .14703 .1816 .0592 .1372

.850 .4364 .2078 .0278 .0425

.925 .2679 .1144 .0190 .1593

.995 .1144 .0037 .0037 .3211

.995 .0592 .0190 .0037 .3885

.995 .1144 .0037 .0037 .4147

 $\Delta \text{CPA} (\text{5}) = 12.023 \quad \text{BETA} (\text{1}) = -3.855 \quad \text{MACH} = 1.2460 \quad \text{O} = 599.73 \quad \text{P} = 551.81 \quad \text{RNL} = 3.0130$

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6651 .3132 .3115 .2541 .2645

.325 .2735 .1932 .1385 .1585 .2121

.350 .3532 .2135 .1390 .1535 .2129

.150 .1653 .1235 .0864 .1316 .1797

.200 .1653 .1531 .0449 .1995 .1647

.325 .1653 .1531 .2505 .2500 .0532

.375 .1653 .1531 .2311 .2331 .3293

.425 .1653 .1531 .1576 .1876 .1446

.475 .1653 .1531 .1130 .1153 .0015 .3586

.525 .1653 .1531 .0539 .0539 .4355

 $\Delta \text{CPA} (\text{5}) = 12.037 \quad \text{BETA} (\text{2}) = -1.182 \quad \text{MACH} = 1.2460 \quad \text{O} = 599.73 \quad \text{P} = 551.81 \quad \text{RNL} = 3.0130$

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BV .1590 .3170 .4590 .6020 .6970 .8390 .9250

X/CY .6749 .1695 .3425 .2682 .3165

.1225 .1715 .1251 .1273 .2040 .2649

.150 .3038 .1233 .1090 .1870 .2129

.165 .2662 .1215 .0524 .0574 .0405

.180 .2662 .1215 .0791 .0285 .0702

.185 .1561 .1594 .0856 .2066 .0463

.195 .1561 .1594 .1628 .1355 .3541

.210 .1432 .1215 .0529 .0899 .1051 .3941

.225 .1432 .1215 .0535 .0321 .0412 .4356

.235 .1432 .1215 .0535 .0321 .0412 .4356

.250 .1432 .1215 .0535 .0321 .0412 .4356

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

A_PLA / B:		12.032	BETA / 3:	4.249	MACH = 1.2460	O = 599.73	P = 551.81	RNL = 3.0130
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP						
Z_B4	-1590	.3170	.4590	.6020	.6970	.8390	.9250	
X_C1	EE73	4345						
X_C2	.C701	-2433						
X_C3	.4772	-2259						
X_C4	.1585	-1573						
X_C5	.0327	-1483						
X_C6	.2155	-1263						
X_C7	.1011	-1561						
X_C8	.4913	-1652						
X_C9	.2618	-1520						
X_C10								
X_C11								
X_C12								
X_C13								
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TABULATED PRESSURE DATA - OA114B (AMES 11-073-1)

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AMES 11-073(0A14B) - 140A/B/C ORB VERTICAL

(1XBW73) (13 AUG 75)

REFERENCE DATA

SCALE =	2500.000 SQ. FT.	XNP =	1076.6800 IN. X0
LEEF =	.474.8000 IN.	YNP =	.0000 IN. Y0
EEF =	.935.5620 IN.	ZNP =	.375.0000 IN. Z0
SCALE =	.0333		

ALPHA (1) = -3.958 BETA (1) = -3.850 MACH = 1.1008 Q = 600.53 P = 707.91 RNL = 3.1821

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.000	.6955	.5589	.5426	.6551	.6270
	.025	.5460	.4083	.4397	.5067	.4477
	.050	.5373	.4128	.4187	.4924	.4491
	.100	.4112	.3344	.3636	.4292	.3859
	.150	.2745	.2721	.3515	.3921	.3265
	.200	.1525	.1164	.4132	.4437	.1167
	.250	.0655	.2331	.1169	.3950	.3591
	.300	.02457	.2157	.3017	.3187	.1729
	.350	.03889	.1935	.2112	.1827	-.0435

ALPHA (1) = -3.953 BETA (2) = -190 MACH = 1.1008 Q = 600.53 P = 707.91 RNL = 3.1821

SECTION 1: VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY	.000	.7546	.6222	.6579	.6498	.5394
	.025	.2534	-.0162	-.0689	-.0763	-.1453
	.050	.2610	.0217	.1315	.0703	-.0489
	.100	.2874	.1261	.1806	.2447	.2446
	.150	.1233	.0725	.2230	.2928	.2510
	.200	-.0285	-.0090	.3821	.3315	.1109
	.250	-.4165	-.1675	.3750	.3486	-.4219
	.300	-.2529	.1563	.2635	.2773	.1478
	.350	.0603	.1528	.1711	.1501	-.4052

E-17E 14 FEB 75

TABULATED PRESSURE DATA - OAI48 (AMES 11-073-1)

ALPHA (1) = -3.953 BETA (3) = 4.266 MACH = 1.1008 0 = 600.53 P = 707.91 RNL = 3.1B21

SECTION 11: VERTICAL

X/CP	Z/B	.1560	.3170	.4590	.6020	.6970	.8390	.9250
		5.74	5.59	5.11	-4.789	-2.981	1.770	
		-5.203	-3.351	-4.895	-4.895	-5.186	-3.781	
		-3.89	-2.658	-3.239	-3.239	-5.098	-3.659	
		-1.133	-0.635	-1.160	-1.160	-5.05	-3.229	
		-1.150	-0.635	-1.056	-1.056	-4.150	-3.581	
		-1.202	-0.680	-1.084	-1.084	-4.077	-3.374	
		-1.115	-1.134	-1.084	-1.084	-2.915	-3.035	
		-1.524	-0.679	-1.084	-1.084	-2.243	-2.805	
		-1.524	-1.134	-1.084	-1.084	-0.095	-0.286	
		-1.115	-1.134	-1.084	-1.084	-0.305	-0.315	

A₂ P4(1, 2) = .052 BETA (1) = -3.869 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		5.55	4.325	4.639	5.500	5.372		
		-5.15	-3.012	-3.321	-4.525	-4.105		
		-4.85	-3.118	-3.178	-4.410	-4.105		
		-1.62	-2.310	-2.716	-3.816	-3.548		
		-1.51	-2.310	-2.716	-3.816	-3.548		
		-1.318	-1.805	-2.511	-3.556	-2.893		
		-1.180	-1.585	-2.511	-3.556	-2.893		
		-1.180	-1.585	-2.511	-3.556	-2.893		
		-1.472	-1.227	-0.980	-3.228	-3.356		
		-1.472	-1.227	-0.980	-3.228	-3.356		
		-1.223	-1.095	-1.254	-2.828	-1.357		
		-1.223	-1.095	-1.254	-2.828	-1.357		
		-1.095	-0.677	-1.544	-1.809	-1.548	-0.627	

A₂ P4(1, 2) = .052 BETA (2) = 1.177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		7.129	5.518	5.355	6.000	4.630		
		-1.679	-1.054	-1.145	-0.000	-1.577		
		-1.225	-0.350	-0.194	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.533	-0.533	-1.1333	-0.000	-0.000	-0.000	

A₂ P4(1, 2) = .052 BETA (2) = 1.177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		7.129	5.518	5.355	6.000	4.630		
		-1.679	-1.054	-1.145	-0.000	-1.577		
		-1.225	-0.350	-0.194	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.533	-0.533	-1.1333	-0.000	-0.000	-0.000	

A₂ P4(1, 2) = .052 BETA (2) = 1.177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		7.129	5.518	5.355	6.000	4.630		
		-1.679	-1.054	-1.145	-0.000	-1.577		
		-1.225	-0.350	-0.194	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.533	-0.533	-1.1333	-0.000	-0.000	-0.000	

A₂ P4(1, 2) = .052 BETA (2) = 1.177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		7.129	5.518	5.355	6.000	4.630		
		-1.679	-1.054	-1.145	-0.000	-1.577		
		-1.225	-0.350	-0.194	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.533	-0.533	-1.1333	-0.000	-0.000	-0.000	

A₂ P4(1, 2) = .052 BETA (2) = 1.177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		7.129	5.518	5.355	6.000	4.630		
		-1.679	-1.054	-1.145	-0.000	-1.577		
		-1.225	-0.350	-0.194	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.533	-0.533	-1.1333	-0.000	-0.000	-0.000	

A₂ P4(1, 2) = .052 BETA (2) = 1.177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		7.129	5.518	5.355	6.000	4.630		
		-1.679	-1.054	-1.145	-0.000	-1.577		
		-1.225	-0.350	-0.194	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-1.020	-1.035	-1.290	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.865	-0.865	-1.315	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.727	-0.727	-1.2618	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.620	-0.620	-1.2320	-0.000	-0.000	-0.000	
		-0.533	-0.533	-1.1333	-0.000	-0.000	-0.000	

A₂ P4(1, 2) = .052 BETA (2) = 1.177 MACH = 1.1000 0 = 599.94 P = 708.37 RNL = 3.1B30

SECTION 11: VERTICAL

X/CP	Z/B	.1580	.3170	.4590	.6020	.6970	.8390	.9250
		7.129	5.518	5.355	6.000	4.630		
		-1.679	-1.054	-1.145	-0.000	-1.577		
		-1.225	-0.350	-0.194	-0.000	-0.000	-0.000	
		-1.150	-2.54	-0.334	-0.000	-0.000</		

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TABULATED PRESSURE DATA - OA14P : AMES 11-073-1

PAGE 7047

ALPHA (4) = 7.364 BETA (3) = 4.233 MACH = 1.1000 Q = 599.94 P = 708.36 RNL = 3.1754
 SECTION : 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .9250
 X/CY

.020 -.6037 .3857 .2719 -.0893
 .025 -.0465 -.3811 -.6252 -.6279
 .050 .0552 -.3244 -.6407 -.6279
 .150 .0676 -.1922 -.3281 -.5887
 .300 -.1212 -.2277 -.2883 -.5065
 .620 -.3075 -.3285 -.0350 .45
 .625 -.5602 -.2251 -.1112 .0226 -.105
 .775 -.4395 -.2737 -.1117 -.0276 .0029 -.3856
 .900 -.2395 -.1489 -.0726 -.0719 -.0279 .4478
 -.2395 -.1489 -.0726 -.0719 -.1450 .4866

ALPHA (5) = 12.057 BETA (1) = -3.848 MACH = 1.0997 Q = 599.84 P = 708.61 RNL = 3.1785
 SECTION : 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.020 .6476 .3649 .2275 .2166 .2441
 .025 .2038 .1399 .0751 .2094 .2942
 .050 .2801 .1352 .0737 .2328 .2718
 .150 .1518 .0312 .0131 .2223 .2155
 .300 -.0266 -.0500 -.0083 .2330 .1797
 .520 -.1450 -.1292 -.2556 .3069 .0161
 .685 -.6322 -.0223 -.1605 .2633 .2412 .043
 .775 -.4460 -.0617 .1197 .2180 .0919 .4415
 .900 -.2758 .0928 .1293 .0879 .1292 .5259

ALPHA (5) = 12.077 BETA (2) = -1.80 MACH = 1.0997 Q = 599.84 P = 708.61 RNL = 3.1785
 SECTION : 1) VERTICAL

Z/BV .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.020 .5371 .3947 .2925 .2770 .1367
 .025 .1102 .1763 .1957 .3572 .4475
 .050 .2463 .0219 .1953 .2283 .3784
 .150 .1353 .0797 .1477 .1207 .0071
 .300 -.0721 -.1655 .1787 .0576 .1050
 .520 -.2498 -.2486 .0383 .2320 .0194
 .685 -.5904 -.1139 -.1315 .0815 .1284
 .775 -.4697 -.2610 .0541 .0381 .1318 .0574
 .900 -.1544 -.1544 .0204 .0498 .1245 .4932

ORIGINAL WORK
JP DOUR (11-073-1)

AMES 11-073-1

ORB VERT/ICAL

DEPEN

VARIABLE CP

INFE 9V73)

P

= 708.36

RNL

= 3.1754

DATE 14 FEB 75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7048

ALPHA (5) = .12.075 BETA (3) = .4.245 MACH = 1.0997 Q = 599.84 P = 708.61 RN/L = 3.1785

AMES 11-073(OA148) - 140A/B/C ORB VERTICAL

'XE8V73)

SECTION (1) VERTICAL

DEPENDENT VARIABLE CP

Z/BY .1590 .3170 .4590 .5020 .6970 .8390 .9251

X/CY

.030	.6344	.3672	.2029	-.0052	-.1702
.025	-.0553	-.3953	-.6222	-.7529	-.6467
.050	.0972	-.3361	-.6455	-.7665	-.6541
.150	.0673	-.2072	-.3995	-.5767	-.6219
.320	-.1457	-.2625	-.3160	-.4529	-.5929
.620	-.3231	-.3532	-.2822	-.1000	-.1017
.685	-.5755	-.2595	-.0265	-.0305	-.4222
.775	-.4675	-.3032	-.2819	-.0509	-.4679
.900	-.2602	-.2018	-.1321	-.1033	-.1774

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(OA14B) -140A/B/C ORB VERTICAL

REFERENCE DATA

Z/BF	=	2593.0000	SQ.FT.	XMAP =	1076.6000	IN. X0
Z/BF	=	474.6000	IN.	YMAP =	.0000	IN. Y0
Z/BF	=	935.7690	IN.	ZMAP =	375.0000	IN. Z0
Z/CV	=	.3600				

ALPHA (1) = -3.993 BETA (1) = -3.854 MACH = .90080 Q = 600.60 P = 1057.3 RN/L = 3.5738

SECTION 11 VERTICAL

		DEPENDENT VARIABLE CP	
Z/BV		Z/BV	
X.CV	.5017	.3636	.4484
.225	.4043	.2954	.3608
.250	.7973	.2820	.3367
.150	.2507	.1888	.2657
.300	.1216	.0899	.2354
.200	.1028	.0585	.3044
.180	.2558	.1533	.2554
.175	.2113	.1570	.1400
.300	.0024	.0169	.0149
ALPHA (1) = -3.915	BETA (1) =	.189	MACH = .90080 Q = 600.60 P = 1057.3 RN/L = 3.5738

SECTION 11 VERTICAL

		DEPENDENT VARIABLE CP	
Z/BV		Z/BV	
X.CV	.5921	.5025	.5774
.225	.2776	.1952	.2628
.250	.2035	.0515	.0278
.150	.1337	.0024	.0562
.300	.2013	.0374	.0394
.200	.2225	.0021	.2273
.180	.2835	.1014	.1780
.200	.2173	.0207	.0654
.300	.0542	.0428	.0535
ALPHA (1) = -3.993	BETA (1) =	.1942	MACH = .90080 Q = 600.60 P = 1057.3 RN/L = 3.5738

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(XEBV74) (13 AUG 75)

PARAMETRIC DATA

RUDDER	=	-5.000	SPDBRK =	55.000
BDFLAP	=	16.300	L-ELVN =	-10.000
R-ELVN	=	-10.000	MACH =	.900

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TABULATED PRESSURE DATA - OA14B (AMES 11-073/0A14B) - 140A/B/C

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$\alpha_{\text{LIFT}} = -3.96$		$\beta_{\text{MACH}} = 4.265$	$\text{MACH} = .90080$	$Q = 600.60$	$P = 1057.3$	$RN/L = 3.5738$	$(XEV74)$
SECTION 1: VERTICAL							
Z: 9.	.1580	.3170	.4590	.6020	.6970	.8390	.9250
α_{LIFT}	.000	.4550	.3452	.3142	.1171	.0574	
	.125	.1982	.1551	.6217	.5078	.4054	
	.150	.1080	.15935	.6449	.4974	.3845	
	.175	.1282	.1205	.5892	.5024	.3494	
	.200	.2321	.2321	.2132	.4220	.3674	
	.225	.1427	.1427	.0624	.0942	.4016	
	.250	.3452	.3452	.0611	.0039	.2602	
	.275	.3452	.3452	.0246	.0452	.3788	
	.300	.2243	.2243	.0257	.1191	.1492	.3620
$\alpha_{\text{LIFT}} = 2.0$	.000	$\beta_{\text{MACH}} = -3.868$	$\text{MACH} = .90127$	$C = 600.67$	$P = 1056.4$	$RN/L = 3.5726$	
SECTION 1: VERTICAL							
Z: 8.	.1680	.3170	.4590	.6020	.6970	.8390	.9250
α_{LIFT}	.000	.2782	.3774	.4819	.4258		
	.125	.1234	.3249	.3017	.2287		
	.150	.2245	.301	.2993	.2377		
	.175	.1241	.2340	.2335	.1729		
	.200	.1241	.1991	.1917	.1012		
	.225	.1241	.2720	.2259	.0895		
	.250	.1241	.2269	.1713	.1308	.3170	
	.275	.1241	.1177	.0904	.0753	.2951	
	.300	.1241	.3352	.3853	.2208	.3072	
$\alpha_{\text{LIFT}} = 2.0$	.000	$\beta_{\text{MACH}} = .180$	$\text{MACH} = .90127$	$Q = 600.67$	$P = 1056.4$	$RN/L = 3.5726$	
SECTION 1: VERTICAL							
Z: 8.	.1680	.3170	.4590	.6020	.6970	.8390	.9250
α_{LIFT}	.000	.5130	.4441	.3111			
	.125	.1663	.2324	.2294	.3873		
	.150	.1663	.0981	.1089	.2296		
	.175	.1663	.0256	.0392			
	.200	.1663	.0520	.0758	.0244		
	.225	.1663	.1955	.1677	.0194		
	.250	.1663	.1634	.0970	.1125		
	.275	.1663	.0352	.1237	.3624		
	.300	.1663	.0352	.1237	.3256		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7051

ALPHA (2) = .055		BETA (3) = 4.248	MACH = .90127	0 = 600.67	P = 1056.6	RNL = 3.5726
SECTION / INVERTICAL		DEPENDENT VARIABLE CP				(XE8V74)
Z'BV	.1580	.3170	.4590	.6020	.6970	.8390
X/C						
.300	-4320	-2755	.2345	.0253	-.0549	
.225	-2791	-.6930	-.6946	-.5307	-.4421	
.150	-.1702	-.6117	-.6884	-.5189	-.4222	
.150	-.1773	-.3593	-.3739	-.5291	-.3769	
.200	-.2508	-.2619	-.2261	-.4439	-.4042	
.500	-.3550	-.1257	-.0054	-.0326	-.3904	
.695	-.2854	-.0262	-.1430	-.0366	-.0362	
.775	-.3363	-.0452	-.0127	-.0011	-.0077	
.300	-.1231	-.1059	-.1238	-.1676	-.1759	
ALPHA (3) = 4.061	BETA (1) = -3.875	MACH = .90140	Q = 601.01	P = 1056.6	RNL = 3.5771	
SECTION / INVERTICAL		DEPENDENT VARIABLE CP				
Z'BV	.1580	.3170	.4590	.6020	.6970	.8390
X/C						
.300	.3831	.2325	.3052	.4176	.3662	
.225	.2653	.1755	.3033	.2830	.2088	
.150	.2513	.1762	.2730	.2690	.2116	
.150	.1216	.0948	.2053	.2055	.1451	
.150	.3154	.0111	.1836	.1675	.0763	
.150	.1692	.0158	.2454	.1842	-.1133	
.300	.2761	.1432	.1406	.1449	.1111	
.300	.2207	.0707	.1251	.0391	.0650	
.300	-.0677	-.0110	-.0557	-.1055	-.2204	
ALPHA (3) = 4.379	BETA (2) = .183	MACH = .90140	Q = 601.01	P = 1056.6	RNL = 3.5771	
SECTION / INVERTICAL		DEPENDENT VARIABLE CP				
Z'BV	.1580	.3170	.4590	.6020	.6970	.8390
X/C						
.300	5935	.3760	.4459	.3792	.2440	
.225	-.6519	-.2746	-.2692	-.2327	-.3864	
.150	-.0383	-.3493	-.3085	-.1256	-.2178	
.150	-.0358	-.2835	-.0119	.0173	.0053	
.150	-.1229	-.1232	.0439	.0513	-.0051	
.300	-.2624	-.12745	.1605	.1399	-.1294	
.300	-.2921	-.12762	.1387	.0950	.0567	
.300	-.2176	-.13022	.0327	.0121	.1353	
.300	-.2176	-.13025	-.0731	-.1499	-.2657	

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7053

AMES 11-07310A148) -140A/B/C				ORB VERTICAL	(XEBV74)	RNL = 3.5771
ALPHA (1) = 8.031	BETA (3) = 4.235	MACH = .90130	C = 600.85	P = 1056.6	RNL = 3.5771	
SECTION 1 : INERTIAL CP						
DEPENDENT VARIABLE CP						
Z 84	.1582	.3170	.4590	.6020	.6970	.8390 .9250
X/C						
.055	.2269	.1820		.0971		.-2069
.025	.2331	.6927		.6315		.-4518 .-1123
.050	.1730	.6439		.5220		.-4404 .-3860
.150	.1760	.3837		.6104		.-4584 .-3390
.250	.2779	.2645		.3067		.-4492 .-3760
.350	.3780	.1424		.0784		.-1943 .-4097
.450	.2814	.0971	-1.1379	.0526	.0182	.-1182 .-3433
.550	.1846	.0639	.0191	.0195	.0077	.-1190 .-3191
.650	.1346	.0639	.0191	.0147	.1528	.-2081 .-3084
Z-F4 : B1 = 11.383	BETA (1) = -3.859	MACH = .90157	O = .90157	P = 601.36	RNL = 1056.9	RNL = 3.5829
SECTION 1 : INERTIAL CP						
DEPENDENT VARIABLE CP						
Z 84	.1582	.3170	.4590	.6020	.6970	.8390 .9250
X/C						
.055	.3554	.1493		.1725		.2773 .2266
.025	.0844	.3268		.2519		.-2562 .1908
.050	.0198	.0866		.2213		.2410 .1799
.150	.0250	.0867		.1721		.1751 .1050
.250	.0320	.0867		.1616		.1346 .0359
.350	.0320	.0867		.1616		.1346 .0359
.450	.0320	.0867		.1616		.1346 .0359
.550	.0320	.0867		.1616		.1346 .0359
.650	.0320	.0867		.1616		.1346 .0359
Z-F4 : B1 = 12.020	BETA (2) = .183	MACH = .90157	O = .90157	P = 601.36	RNL = 1056.9	RNL = 3.5829
SECTION 1 : INERTIAL CP						
DEPENDENT VARIABLE CP						
Z 84	.1582	.3170	.4590	.6020	.6970	.8390 .9250
X/C						
.055	.3933	.2453		.3619		.2873 .1553
.025	.0251	.3049		.2803		.-2435 .-3660
.050	.0379	.1559		.1057		.-1115 .-2083
.150	.0653	.1665		.0179		.-0038 .-0309
.250	.0654	.1665		.0181		.0226 .0328
.350	.0655	.1665		.1341		.1022 .1623
.450	.0655	.1665		.1549		.0250 .2657
.550	.0655	.1665		.0123		.-1499 .-3037
.650	.0655	.1665		.0245		.-1739 .-3196

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)
 AMES 11-073(OA148) -140A/B/C ORB VERTICAL

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(13 AUG 75)

REFERENCE DATA

A_{REF}	.1650	.3170	.4593	.6020	.6970	.8390	.9250
α	-3.939						
β							
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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 7061

ALPHA (4) = 8.077 BETA (3) = .178 MACH = .59626 0 = 593.97 P = 2386.7 RN/L = 4.8657
 SECTION 1 : VERTICAL DEPENDENT VARIABLE CP

Z/B/ .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.000 .4077 .3278 .2586 .2605 .1473
 .025 -.0749 -.3160 -.3066 -.2365 -.4279
 .050 .0162 -.0767 -.0670 -.1086 -.1708
 .150 -.0477 -.0917 -.0298 -.0455 -.0579
 .300 -.1372 -.1179 -.0131 -.0201 -.0579
 .500 -.2772 -.0489 .0639 .0583 .1114
 .585 -.2579 .0250 -.1550 .0157 .0142
 .775 -.2136 -.0448 -.0589 -.1020 -.0914
 .800 -.1645 -.2475 -.2550 -.2315 -.1619
 .800

Δ_{PFA} (4) = 8.379 BETA (4) = 4.235 MACH = .59626 0 = 593.97 P = 2386.7 RN/L = 4.8657
 SECTION 1 : VERTICAL DEPENDENT VARIABLE CP

Z/B/ .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.000 .2279 .2496 .0858 .3302 .3721
 .025 -.1644 -.1725 -.7210 -.5458 -.7146
 .050 -.3237 -.3519 -.6975 -.5249 -.5934
 .150 -.2517 -.3170 -.3045 -.5854 -.5854
 .200 -.1533 -.1493 -.2699 -.1993 -.1191
 .250 -.1345 -.1162 -.0579 -.0125 -.1717
 .300 -.2537 -.3138 -.1675 -.1131 -.0162
 .300 -.2325 -.1935 -.1279 -.1322 -.2204
 .300 -.2123 -.2134 -.2334 -.2864 -.2431
 .300

ALPHA (5) = 8.076 BETA (5) = 8.290 MACH = .59626 0 = 593.97 P = 2386.7 RN/L = 4.8657
 SECTION 1 : VERTICAL DEPENDENT VARIABLE CP

Z/B/ .1580 .3170 .4590 .6020 .6970 .8390 .9250
 X/CY

.000 -.1290 -.0551 -.7176 -.6394 -.5912
 .025 -.6710 -.1298 -.5923 -.5927 -.4257
 .050 -.1294 -.1960 -.9241 -.5915 -.4203
 .150 -.6235 -.1517 -.8720 -.6235 -.3937
 .200 -.1361 -.4131 -.7759 -.6224 -.3719
 .250 -.1363 -.3255 -.4165 -.4893 -.3298
 .300 -.2730 -.4727 -.1793 -.4171 -.4097
 .300 -.2650 -.1816 -.1531 -.3095 -.3004
 .300 -.2650 -.1816 -.1531 -.3095 -.3004
 .300

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

PAGE 7062

ALPHA (5) = 11.984 BETA (1) = -7.850 MACH = .59636 Q = 594.09 P = 2386.3 RNL = 4.8671

SECTION 11 VERTICAL

DEPENDENT VARIABLE CP

Z/B4 .1550 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .200 -1.1495 -.5199 -.4363 -.1569 -.1440
 .225 .2862 .3070 .3535 .3115 .2517
 .250 .2133 .2794 .3276 .2955 .2360
 .150 .1136 .1653 .2447 .2110 .1355
 .300 .0245 .0991 .1907 .1507 .0631
 .160 -.1462 .1115 .1794 .1427 -.0642
 .065 -.2473 .1467 -.1602 .1149 .0657 -.1473
 .175 -.2392 .1969 .0484 .0133 .0197 -.0401
 .503 -.5053 -.1505 -.1527 -.1235 -.0886 -.1588

ALPHA (5) = 12.033 BETA (2) = -3.840 MACH = .59536 Q = 594.09 P = 2386.3 RNL = 4.8671

SECTION 11 EPIPLANAR

DEPENDENT VARIABLE CP

Z/B4 .1550 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .200 .2786 .2715 .1028 .2001 .1290
 .225 .1820 .1537 .2247 .1897 .1380
 .250 .1721 .1320 .1928 .1708 .1201
 .150 .1315 .1053 .1290 .1053 .0532
 .300 -.0562 -.0111 .1053 .0734 -.0031
 .160 -.2315 .0309 .1247 .1220 -.1037
 .1855 -.2521 .0321 .1522 .0268 .0338
 .1775 -.2611 .0321 -.0239 .0311 .0401
 .190 -.1106 -.1840 -.1840 -.2020 -.1874 -.1232 -.1960

ALPHA (5) = 12.038 BETA (3) = .180 MACH = .59636 Q = 594.09 P = 2386.3 RNL = 4.8671

SECTION 11 EPIPLANAR

DEPENDENT VARIABLE CP

Z/B4 .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY
 .200 -.3915 .2213 -.3216 .2165 .1122
 .225 -.0512 -.3066 -.2670 -.2338 -.4059
 .250 -.0298 -.1369 -.0521 -.0939 -.1460
 .150 -.0625 -.1064 -.0336 -.0553 -.0662
 .300 -.1143 -.0762 -.0259 -.0244 -.0531
 .160 -.0828 -.0636 -.0517 -.0430 -.1116
 .185 -.0638 -.0563 -.0253 -.0333 -.1875
 .1775 -.2161 -.0562 -.1225 -.0947 -.1100 -.1979
 .190 -.1304 -.0563 -.2453 -.2515 -.2416 -.1925

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7063

AMES 11-073(0A148) -140A/B/C ORB VERTICAL
 $\Delta P_{\text{PA}} (\text{PSI}) = .12, \text{MACH} = 4.244, \text{RNL} = 4.8671$

SECTION 1: VERTICAL

SECTION 2: EPTICAL

SECTION 3: EPICAL

SECTION 4: EPICAL

SECTION 5: EPICAL

SECTION 6: EPICAL

SECTION 7: EPICAL

SECTION 8: EPICAL

SECTION 9: EPICAL

SECTION 10: EPICAL

SECTION 11: EPICAL

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SECTION 41: EPICAL

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SECTION 45: EPICAL

SECTION 46: EPICAL

SECTION 47: EPICAL

AMES 11-073(0A148) -140A/B/C ORB VERTICAL
 $\Delta P_{\text{PA}} (\text{PSI}) = .1580, \text{MACH} = 8.307, \text{RNL} = 4.8671$

SECTION 1: VERTICAL

SECTION 2: EPTICAL

SECTION 3: EPICAL

SECTION 4: EPICAL

SECTION 5: EPICAL

SECTION 6: EPICAL

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SECTION 47: EPICAL

AMES 11-073(0A148) -140A/B/C ORB VERTICAL
 $\Delta P_{\text{PA}} (\text{PSI}) = .1590, \text{MACH} = 8.390, \text{RNL} = 4.8671$

SECTION 1: VERTICAL

SECTION 2: EPTICAL

SECTION 3: EPICAL

SECTION 4: EPICAL

SECTION 5: EPICAL

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SECTION 41: EPICAL

SECTION 42: EPICAL

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SECTION 45: EPICAL

SECTION 46: EPICAL

SECTION 47: EPICAL

AMES 11-073(0A148) -140A/B/C ORB VERTICAL
 $\Delta P_{\text{PA}} (\text{PSI}) = .1590, \text{MACH} = 8.390, \text{RNL} = 4.8671$

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7057

COS BETA = 3.263		BETA (3) = 4.246	MACH = 1.3919	O = 599.88	P = 442.29	RNL = 2.9174
SECTION 1 INERTIAL		DEPENDENT VARIABLE CP				(XEB76)
2.0	1.000	.5929	.5432	.4570	.3759	.3012
		-1.1280	-1.1539	-2.78	-4.906	-5535
		-1.3285	-1.4555	-3844	-4842	-5107
		-1.4569	-1.6441	-1.553	-3684	-3969
		-1.5653	-1.5211	-1.101	-0.766	-1.024
		-1.663	-1.5321	-1.955	-0.651	-0.544
		-1.762	-1.715	-1.563	-0.5930	-0.5978
		-1.862	-1.8621	-1.565	-0.5004	-0.4130
		-1.962	-1.9341	-1.6313	-0.5576	-0.4491
		-2.062	-2.0341	-1.6318	-0.5925	-0.5602
		-2.162	-2.0341	-1.6318	-0.5925	-0.5602
		-2.262	-2.162	-1.6318	-0.5925	-0.5602
		-2.362	-2.262	-1.6318	-0.5925	-0.5602
		-2.462	-2.362	-1.6318	-0.5925	-0.5602
		-2.562	-2.462	-1.6318	-0.5925	-0.5602
		-2.662	-2.562	-1.6318	-0.5925	-0.5602
		-2.762	-2.662	-1.6318	-0.5925	-0.5602
		-2.862	-2.762	-1.6318	-0.5925	-0.5602
		-2.962	-2.862	-1.6318	-0.5925	-0.5602
		-3.062	-2.962	-1.6318	-0.5925	-0.5602
		-3.162	-3.062	-1.6318	-0.5925	-0.5602
		-3.262	-3.162	-1.6318	-0.5925	-0.5602
		-3.362	-3.262	-1.6318	-0.5925	-0.5602
		-3.462	-3.362	-1.6318	-0.5925	-0.5602
		-3.562	-3.462	-1.6318	-0.5925	-0.5602
		-3.662	-3.562	-1.6318	-0.5925	-0.5602
		-3.762	-3.662	-1.6318	-0.5925	-0.5602
		-3.862	-3.762	-1.6318	-0.5925	-0.5602
		-3.962	-3.862	-1.6318	-0.5925	-0.5602
		-4.062	-3.962	-1.6318	-0.5925	-0.5602
		-4.162	-4.062	-1.6318	-0.5925	-0.5602
		-4.262	-4.162	-1.6318	-0.5925	-0.5602
		-4.362	-4.262	-1.6318	-0.5925	-0.5602
		-4.462	-4.362	-1.6318	-0.5925	-0.5602
		-4.562	-4.462	-1.6318	-0.5925	-0.5602
		-4.662	-4.562	-1.6318	-0.5925	-0.5602
		-4.762	-4.662	-1.6318	-0.5925	-0.5602
		-4.862	-4.762	-1.6318	-0.5925	-0.5602
		-4.962	-4.862	-1.6318	-0.5925	-0.5602
		-5.062	-4.962	-1.6318	-0.5925	-0.5602
		-5.162	-5.062	-1.6318	-0.5925	-0.5602
		-5.262	-5.162	-1.6318	-0.5925	-0.5602
		-5.362	-5.262	-1.6318	-0.5925	-0.5602
		-5.462	-5.362	-1.6318	-0.5925	-0.5602
		-5.562	-5.462	-1.6318	-0.5925	-0.5602
		-5.662	-5.562	-1.6318	-0.5925	-0.5602
		-5.762	-5.662	-1.6318	-0.5925	-0.5602
		-5.862	-5.762	-1.6318	-0.5925	-0.5602
		-5.962	-5.862	-1.6318	-0.5925	-0.5602
		-6.062	-5.962	-1.6318	-0.5925	-0.5602
		-6.162	-6.062	-1.6318	-0.5925	-0.5602
		-6.262	-6.162	-1.6318	-0.5925	-0.5602
		-6.362	-6.262	-1.6318	-0.5925	-0.5602
		-6.462	-6.362	-1.6318	-0.5925	-0.5602
		-6.562	-6.462	-1.6318	-0.5925	-0.5602
		-6.662	-6.562	-1.6318	-0.5925	-0.5602
		-6.762	-6.662	-1.6318	-0.5925	-0.5602
		-6.862	-6.762	-1.6318	-0.5925	-0.5602
		-6.962	-6.862	-1.6318	-0.5925	-0.5602
		-7.062	-6.962	-1.6318	-0.5925	-0.5602
		-7.162	-7.062	-1.6318	-0.5925	-0.5602
		-7.262	-7.162	-1.6318	-0.5925	-0.5602
		-7.362	-7.262	-1.6318	-0.5925	-0.5602
		-7.462	-7.362	-1.6318	-0.5925	-0.5602
		-7.562	-7.462	-1.6318	-0.5925	-0.5602
		-7.662	-7.562	-1.6318	-0.5925	-0.5602
		-7.762	-7.662	-1.6318	-0.5925	-0.5602
		-7.862	-7.762	-1.6318	-0.5925	-0.5602
		-7.962	-7.862	-1.6318	-0.5925	-0.5602
		-8.062	-7.962	-1.6318	-0.5925	-0.5602
		-8.162	-8.062	-1.6318	-0.5925	-0.5602
		-8.262	-8.162	-1.6318	-0.5925	-0.5602
		-8.362	-8.262	-1.6318	-0.5925	-0.5602
		-8.462	-8.362	-1.6318	-0.5925	-0.5602
		-8.562	-8.462	-1.6318	-0.5925	-0.5602
		-8.662	-8.562	-1.6318	-0.5925	-0.5602
		-8.762	-8.662	-1.6318	-0.5925	-0.5602
		-8.862	-8.762	-1.6318	-0.5925	-0.5602
		-8.962	-8.862	-1.6318	-0.5925	-0.5602
		-9.062	-9.062	-1.6318	-0.5925	-0.5602
		-9.162	-9.162	-1.6318	-0.5925	-0.5602
		-9.262	-9.262	-1.6318	-0.5925	-0.5602
		-9.362	-9.362	-1.6318	-0.5925	-0.5602
		-9.462	-9.462	-1.6318	-0.5925	-0.5602
		-9.562	-9.562	-1.6318	-0.5925	-0.5602
		-9.662	-9.662	-1.6318	-0.5925	-0.5602
		-9.762	-9.762	-1.6318	-0.5925	-0.5602
		-9.862	-9.862	-1.6318	-0.5925	-0.5602
		-9.962	-9.962	-1.6318	-0.5925	-0.5602
		-10.062	-10.062	-1.6318	-0.5925	-0.5602
		-10.162	-10.162	-1.6318	-0.5925	-0.5602
		-10.262	-10.262	-1.6318	-0.5925	-0.5602
		-10.362	-10.362	-1.6318	-0.5925	-0.5602
		-10.462	-10.462	-1.6318	-0.5925	-0.5602
		-10.562	-10.562	-1.6318	-0.5925	-0.5602
		-10.662	-10.662	-1.6318	-0.5925	-0.5602
		-10.762	-10.762	-1.6318	-0.5925	-0.5602
		-10.862	-10.862	-1.6318	-0.5925	-0.5602
		-10.962	-10.962	-1.6318	-0.5925	-0.5602
		-11.062	-11.062	-1.6318	-0.5925	-0.5602
		-11.162	-11.162	-1.6318	-0.5925	-0.5602
		-11.262	-11.262	-1.6318	-0.5925	-0.5602
		-11.362	-11.362	-1.6318	-0.5925	-0.5602
		-11.462	-11.462	-1.6318	-0.5925	-0.5602
		-11.562	-11.562	-1.6318	-0.5925	-0.5602
		-11.662	-11.662	-1.6318	-0.5925	-0.5602
		-11.762	-11.762	-1.6318	-0.5925	-0.5602
		-11.862	-11.862	-1.6318	-0.5925	-0.5602
		-11.962	-11.962	-1.6318	-0.5925	-0.5602
		-12.062	-12.062	-1.6318	-0.5925	-0.5602
		-12.162	-12.162	-1.6318	-0.5925	-0.5602
		-12.262	-12.262	-1.6318	-0.5925	-0.5602
		-12.362	-12.362	-1.6318	-0.5925	-0.5602
		-12.462	-12.462	-1.6318	-0.5925	-0.5602
		-12.562	-12.562	-1.6318	-0.5925	-0.5602
		-12.662	-12.662	-1.6318	-0.5925	-0.5602
		-12.762	-12.762	-1.6318	-0.5925	-0.5602
		-12.862	-12.862	-1.6318	-0.5925	-0.5602
		-12.962	-12.962	-1.6318	-0.5925	-0.5602
		-13.062	-13.062	-1.6318	-0.5925	-0.5602
		-13.162	-13.162	-1.6318	-0.5925	-0.5602
		-13.262	-13.262	-1.6318	-0.5925	-0.5602
		-13.362	-13.362	-1.6318	-0.5925	-0.5602
		-13.462	-13.462	-1.6318	-0.5925	-0.5602
		-13.562	-13.562	-1.6318	-0.5925	-0.5602
		-13.662	-13.662	-1.6318	-0.5925	-0.5602
		-13.762	-13.762	-1.6318	-0.5925	-0.5602
		-13.862	-13.862	-1.6318	-0.5925	-0.5602
		-13.962	-13.962	-1.6318	-0.5925	-0.5602
		-14.062	-14.062	-1.6318	-0.5925	-0.5602
		-14.162	-14.162	-1.6318	-0.5925	-0.5602
		-14.262	-14.262	-1.6318	-0.5925	-0.5602
		-14.362	-14.362	-1.6318	-0.5925	-0.5602
		-14.462	-14.462	-1.6318	-0.5925	-0.5602
		-14.562	-14.562	-1.6318	-0.5925	-0.5602
		-14.662	-14.662	-1.6318	-0.5925	-0.5602
		-14.762	-14.762	-1.6318	-0.5925	-0.5602
		-14.862	-14.862	-1.6318	-0.5925	-0.5602
		-14.962	-14.962	-1.6318	-0.5925	-0.5602
		-15.062	-15.062	-1.6318	-0.5925	-0.5602
		-15.162	-15.162	-1.6318	-0.5925	-0.5602
		-15.262	-15.262	-1.6318	-0.5925	-0.5602
		-15.362	-15.362	-1.6318	-0.5925	-0.5602
		-15.462	-15.462	-1.6318	-0.5925	-0.5602
		-15.562	-15.562	-1.6318	-0.5925	-0.5602
		-15.662	-15.662	-1.6318	-0.5925	-0.5602
		-15.762	-15.762	-1.6318	-0.5925	-0.5602
		-15.862	-15.862	-1.6318	-0.5925	-0.5602
		-15.962	-15.962	-1.6318	-0.5925	-0.5602
		-16.062	-16.062	-1.6318	-0.5925	-0.5602
		-16.162	-16.162	-1.6318	-0.5925	-0.5602
		-16.262	-16.262	-1.6318	-0.5925	-0.5602
		-16.362	-16.362</td			

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

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SECTION 1: VERTICAL		SECTION 2: VERTICAL		SECTION 3: VERTICAL		SECTION 4: VERTICAL	
Z	BET _A	Z	BET _A	Z	BET _A	Z	BET _A
A-Beta = 11.308 BET _A (3) = 4.262 MACH = 1.3930 Q = 600.10 P = 441.82 Rn/L = 2.9227							
X		X		X		X	
1.202	.6185	1.4694	.3097	2.133	.1715		
1.285	.5780	1.1527	.1597	.4726	-.5391		
1.362	.5274	1.1465	.15913	.4735	-.5173		
1.432	.4263	1.0342	.1416	.3239	-.3918		
1.501	.3419	1.2843	.1442	.1691	-.1734		
1.569	.3191	1.1703	.0548	.1350	-.1268		
1.636	.2162	1.1612	.1585	.5955	-.5911		
1.695	.1618	1.1612	.6176	.6013	-.5930		
1.753	.1467	1.1612	.62229	.6137	-.6139		
A-Beta = 15.317 BET _A (1) = -3.833 MACH = 1.3931 Q = 500.28 P = 442.53 Rn/L = 2.9208							
SECTION 1: VERTICAL							
Z	BET _A	Z	BET _A	Z	BET _A	Z	BET _A
X		X		X		X	
1.158	.6185	1.1527	.1597	2.469	.2319		
1.186	.5780	1.1465	.15913	.1360	.1239		
1.224	.5274	1.0342	.1416	.1350	.1334		
1.262	.4263	1.1703	.0548	.3627	.0513		
1.301	.3419	1.1612	.1585	.0614	.0410		
1.359	.2162	1.1612	.6176	.0026	.0551		
1.418	.1618	1.1612	.62229	.5785	.5930		
1.476	.1467	1.1612	1.6371	.5789	.5641		
A-Beta = 15.317 BET _A (2) = .190 MACH = 1.3931 Q = 500.28 P = 442.53 Rn/L = 2.9208							
SECTION 2: VERTICAL							
Z	BET _A	Z	BET _A	Z	BET _A	Z	BET _A
X		X		X		X	
1.155	.6185	1.1527	.1597	2.620	.6390	.9250	
1.183	.5780	1.1465	.15913	.2397	.2387	.1647	
1.221	.5274	1.0342	.1416	.1562	.1731	.2177	
1.259	.4263	1.1703	.0548	.1526	.1839	.1920	
1.307	.3419	1.1612	.1585	.1523	.1538	.1512	
1.365	.2162	1.1612	.6176	.1537	.1539	.0553	
1.423	.1618	1.1612	.62229	.1523	.1560	.1172	
1.481	.1467	1.1612	1.6375	.1516	.1549	.4820	
A-Beta = 15.317 BET _A (3) = .690 MACH = 1.3931 Q = 500.28 P = 442.53 Rn/L = 2.9208							
SECTION 3: VERTICAL							
Z	BET _A	Z	BET _A	Z	BET _A	Z	BET _A
X		X		X		X	
1.152	.6185	1.1527	.1597	2.621	.6390	.9250	
1.180	.5780	1.1465	.15913	.2397	.2387	.1647	
1.218	.5274	1.0342	.1416	.1562	.1731	.2177	
1.256	.4263	1.1703	.0548	.1526	.1839	.1920	
1.304	.3419	1.1612	.1585	.1523	.1538	.1512	
1.362	.2162	1.1612	.6176	.1537	.1539	.0553	
1.420	.1618	1.1612	.62229	.1523	.1560	.1172	
1.478	.1467	1.1612	1.6375	.1516	.1549	.4820	
A-Beta = 15.317 BET _A (4) = .690 MACH = 1.3931 Q = 500.28 P = 442.53 Rn/L = 2.9208							
SECTION 4: VERTICAL							
Z	BET _A	Z	BET _A	Z	BET _A	Z	BET _A
X		X		X		X	
1.150	.6185	1.1527	.1597	2.621	.6390	.9250	
1.178	.5780	1.1465	.15913	.2397	.2387	.1647	
1.216	.5274	1.0342	.1416	.1562	.1731	.2177	
1.254	.4263	1.1703	.0548	.1526	.1839	.1920	
1.302	.3419	1.1612	.1585	.1523	.1538	.1512	
1.360	.2162	1.1612	.6176	.1537	.1539	.0553	
1.418	.1618	1.1612	.62229	.1523	.1560	.1172	
1.466	.1467	1.1612	1.6375	.1516	.1549	.4820	
A-Beta = 15.317 BET _A (5) = .690 MACH = 1.3931 Q = 500.28 P = 442.53 Rn/L = 2.9208							

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VERB1 VERB2 VERB3 VERB4 VERB5

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TABULATED PRESSURE DATA - OAI4B (AMES 11-073-1)

AMES 11-073(OAI4B) -140A/B/C ORB VERTICAL

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(XEBV77) (13 AUG 75)

REFERENCE DATA

STATE	25.0	1.000	SQ.FT.	X _{DP}	=	1076.5800	IN. YO	
STATE	25.0	6.000	1.0	Y _{DP}	=	3000	IN. YO	
STATE	25.0	1.000	1.0	Z _{DP}	=	375.0000	IN. ZO	
STATE	25.0	1.000	1.0	X _{CP}	=	1200		

A₁ P-1 = 1.0 A₂ = C₁ S₁ = BETA (1) = -3.849 MACH = 1.2454 0 = 539.63 P = 552.28 RNL = 3.0204

SECTION: 1.0 ERECTED

Z_{CP} = 1580 .3170 .4590 .5020 .5370 .8390 .9250

DEPENDENT VARIABLE CP

C ₁	.6272	.6107	.6277	.6031
C ₂	.6273	.6263	.4305	.4159
C ₃	.6274	.4184	.4241	.4106
C ₄	.6275	.3659	.3559	.3212
C ₅	.6276	.2515	.3203	.2128
C ₆	.6277	.1862	.1316	.0555
C ₇	.6278	.1268	.6244	.594
C ₈	.6279	.6935	.6935	.5590
C ₉	.6280	.6531	.6530	.5637
C ₁₀	.6281	.6555	.6590	.5637

A₂ P-1 = 1.0 A₃ = C₁ S₁ = BETA (2) = .186 MACH = 1.2454 0 = 539.63 P = 552.28 RNL = 3.0204

SECTION: 1.0 ERECTED

Z_{CP} = 1580 .3170 .4590 .5020 .5370 .8390 .9250

DEPENDENT VARIABLE CP

C ₁	.6272	.6077	.5731	.6391	.5732
C ₂	.6273	.6087	.6355	.0587	.1061
C ₃	.6274	.6097	.6280	.0189	.0496
C ₄	.6275	.6108	.6179	.1768	.1756
C ₅	.6276	.6119	.6175	.1742	.1469
C ₆	.6277	.6130	.6170	.6393	.0151
C ₇	.6278	.6140	.6165	.7141	.5230
C ₈	.6279	.6150	.6135	.7175	.7148
C ₉	.6280	.6160	.6120	.7122	.5555
C ₁₀	.6281	.6170	.6102	.6622	.5463

PARAMETRIC DATA

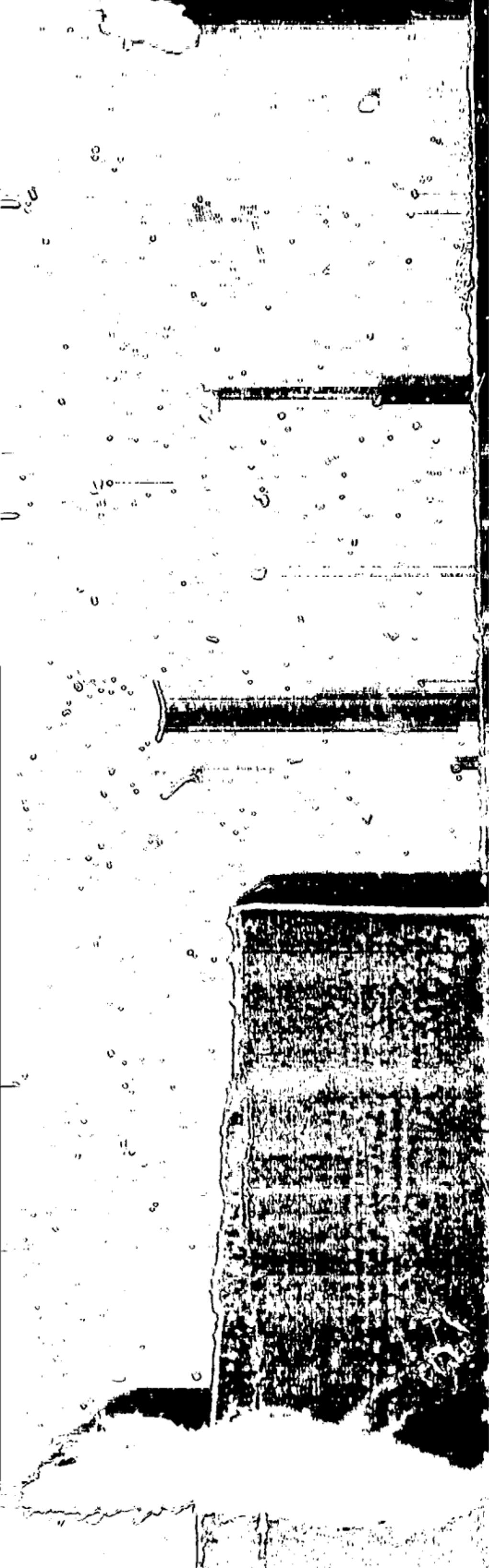
RUDDER = -10.000

BDFLAP = -11.700

L-ELVN = 10.000

R-ELVN = 10.000

MACH = 1.250



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TABULATED PRESSURE DATA - DATA (AMES 11-073-1)

AMES 11-073(CA148) - 4CA/B/C ORB VERTICAL PAGE 7075

ALPHA (4) = 7.978 SETA (3) = 4.242 MACH = 1.2449 Q = 599.64 F = 552.75 FNL = 3.0238

SECTION (1) VERTICAL DEPENDENT VARIABLE CP

X (CY)	0.0	.5360	.4615	.3378	.2489	.1552
.025	.0821	-.2453	-.4437	-.6054	-.6815	
.050	.1266	-.2203	-.4608	-.5970	-.6487	
.075	.1559	-.0822	-.2663	-.3953	-.4692	
.100	.1255	-.1245	-.1734	-.1907	-.1953	
.125	.1195	-.2265	-.0562	-.1818	-.1663	
.150	.1425	-.7743	-.7647	-.7731	-.7579	-.5347
.175	.1486	-.7721	-.7754	-.7625	-.7253	-.5231
.200	.1423	-.6203	-.6324	-.5630	-.5731	-.5103

ALPHA (5) = 11.981 SETA (1) = -3.647 MACH = 1.2454 DEPENDENT VARIABLE CP

X (CY)	0.0	.6862	.4322	.3145	.2545	.2429
.025	.6865	-.1334	-.1244	-.1345	-.1345	-.1342
.050	.3828	-.2114	-.1266	-.1342	-.1342	-.1344
.075	.1863	-.1267	-.0777	-.0736	-.0736	-.0734
.100	.1625	-.0734	-.0737	-.0737	-.0736	-.0734
.125	.1626	-.0736	-.0739	-.0739	-.0739	-.0738
.150	.1626	-.0737	-.0739	-.0739	-.0739	-.0738
.175	.1626	-.0737	-.0739	-.0739	-.0739	-.0738
.200	.1626	-.0737	-.0739	-.0739	-.0739	-.0738

ALPHA (5) = 11.970 SETA (2) = .192 MACH = 1.2454 DEPENDENT VARIABLE CP

X (CY)	0.0	.5170	.4550	.6020	.6370	.9330	.9250
.025	.6732	-.5330	-.3473	-.2678	-.1994		
.050	.1692	-.5659	-.2010	-.2168	-.2697		
.075	.2056	-.1203	-.1824	-.2211	-.2234		
.100	.2253	-.0132	-.0574	-.0655	-.0629		
.125	.0223	-.0323	-.0785	-.0710	-.0723		
.150	.1656	-.1656	-.0256	-.1622	-.1571		
.175	.1656	-.1656	-.7524	-.7533	-.6578		
.200	.1656	-.1656	-.7524	-.7533	-.6369		

ALPHA (5) = 11.970 SETA (2) = .192 MACH = 1.2454 DEPENDENT VARIABLE CP

X (CY)	0.0	.5170	.4550	.6020	.6370	.9330	.9250
.025	.6732	-.5330	-.3473	-.2678	-.1994		
.050	.1692	-.5659	-.2010	-.2168	-.2697		
.075	.2056	-.1203	-.1824	-.2211	-.2234		
.100	.2253	-.0132	-.0574	-.0655	-.0629		
.125	.0223	-.0323	-.0785	-.0710	-.0723		
.150	.1656	-.1656	-.0256	-.1622	-.1571		
.175	.1656	-.1656	-.7524	-.7533	-.6578		
.200	.1656	-.1656	-.7524	-.7533	-.6369		

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7076

ALPHA : 5) =	11.962	BETA (3) =	4.260	MACH =	1.2454	ORB VERTICAL	(XEBV77)	
SECTION (1 VERTICAL						DEPENDENT VARIABLE CP		
Z AV	.1580	.3170	.4590	.6020	.6970	.8390	.9250	RNL = 3.0229
X/C'	.000	.6603	.4345	.2754	.1657	.0333		
	.025	.0507	.2499	.4486	.6036	.6381		
	.050	.1249	.2290	.4795	.5985	.6649		
	.150	.1631	.1040	.3156	.3527	.4388		
	.320	.0362	.1537	.2018	.2454	.2609		
	.520	.2206	.2549	.1031	.2291	.2108		
	.650	.1456	.7773	.1726	.7720	.7614	.7525	.6181
	.775	.1316	.599	.7770	.7698	.7662	.7449	.6583
	.800	.5435	.5435	.7539	.7571	.7420	.7205	.6510

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

AMES 11-073(04148) -140A/B/C ORB VERTICAL

ALPHA (2) = .035 BETA (3) = 4.252 MACH = 1.0990 C = 599.71 P = 709.30 RN/L = 3.1896

SECTION 1: INERTIAL

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(XE8V78)

DEPENDENT VARIABLE CP

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OF POOR QUALITY

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\Delta_F + C = 4.004$ $\text{BETA} (3) = 4.242$ $\text{MACH} = 1.0899$ $Q = 599.58$ $P = 709.30$ $RN/L = 3.1895$

SECTION (1) VERTICAL

Z. BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.5991	.4359	.3460	.2529	.1594
-.1284	-.2930	-.5569	-.7845	-.8442
.0250	.0128	-.6100	-.7627	-.8198
.1500	.0395	-.3741	-.4899	-.5113
.1500	.0395	-.2793	-.2743	-.2770
-.0592	-.1721	-.0910	-.2657	-.2857
.1520	-.2581	-.1292	-.9993	-.9618
.1516	-.4472	-.9569	-.9854	-.6556
.1516	-.2584	-.7556	-.7541	-.7379
.1500	-.5256	-.7654	-.7633	-.7944
		-.7194	-.6363	-.7719

 $\Delta_P + C = 8.002$ $\text{BETA} (1) = -3.857$ $\text{MACH} = 1.1003$ $Q = 600.35$ $P = 708.37$ $RN/L = 3.1925$

SECTION (1) VERTICAL

Z. BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

X/CY

.6237	.3834	.3024	.2756	.2624
.3435	.1517	.0901	.1131	.1131
.1632	.1632	.0920	.1051	.1078
.1500	.2136	.0614	.0421	.0360
.1500	.0217	.0317	.0263	.0179
.1500	-.2265	-.1415	-.0156	
.1500	-.5202	-.9413	-.9655	-.2226
.1500	-.4370	-.6132	-.9571	-.9565
.1500	-.5552	-.8178	-.9372	-.9489
		-.8178	-.8923	-.8239
			-.9393	-.8991
				-.8165

 $\Delta_P + C = 8.002$ $\text{BETA} (2) = .196$ $\text{MACH} = 1.1003$ $Q = 600.35$ $P = 708.37$ $RN/L = 3.1925$

SECTION (1) VERTICAL

Z. BY .1580 .3170 .4590 .6020 .6970 .8390 .9250

.6544	.4425	.3716	.3039	.1990
.1235	-.1231	-.2949	-.3095	-.3778
.1580	.2242	-.2256	-.3335	-.3261
.1500	-.1559	-.3443	-.1028	-.1016
.1500	-.5371	-.1238	-.1186	-.0959
.1500	-.2050	-.2159	-.0057	-.2093
.1500	-.4237	-.9575	-.9751	-.2488
.1500	-.7537	-.9594	-.9641	-.9701
.1500	-.6645	-.7335	-.6951	-.8037
			-.6725	-.6166
				-.7161

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TABULATED PRESSURE DATA - OA14B (AMES 11-073-1)

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AMES 11-073(OA14B) -140A/B/C ORB VERTICAL							(XE8V78)	
SECTION 11 VERTICAL			DEPENDENT VARIABLE CP					RNL = 3.1925
X/CH	BETA (3) = 4.238	MACH = 1.1003	Q = 600.35	P = 708.37				
.000	.6072	.2682	.1687	.099				
.125	-.3457	-.2979	-.5975	-.893				
.150	.0549	-.3376	.6363	-.8085				
.175	.0692	-.2328	.4196	-.4624				
.200	-.1250	-.2325	.2897	-.3466				
.225	-.1512	-.3363	-.1354	-.2973				
.250	-.4117	-.0693	-.9897	-.0090				
.275	-.4668	-.1263	-.9830	-.9547				
.300	-.4668	-.1263	-.9641	-.6551				
A_PMA + 51 = 11-073	BETA (1) = 3.170	.4590	-.6970	.8390	.9250			
SECTION 11 VERTICAL							(XE8V78)	
X/CH	BETA (1) = 3.038	MACH = 1.0980	Q = 599.15	P = 710.01				
.000	.6072	.2439	.1968	.1748				
.125	-.1638	-.2762	.0477	.0550				
.150	-.0742	-.1165	.5302	.0521				
.175	-.0742	-.1165	.0555	.0122				
.200	-.0742	-.1165	-.0578	-.0234				
.225	-.0742	-.1165	-.1319	-.1669				
.250	-.0742	-.1165	-.9732	-.9646				
.275	-.0742	-.1165	-.9732	-.9543				
.300	-.0742	-.1165	-.9732	-.9340				
A_PMA + 51 = 11-073	BETA (2) = 3.170	.4590	-.6970	.8390	.9250			
SECTION 11 VERTICAL							(XE8V78)	
X/CH	BETA (2) = 3.194	MACH = 1.0980	Q = 599.15	P = 710.01				
.000	.6072	.2116	.2982	.2107				
.125	-.1075	-.1622	-.3456	-.3715				
.150	-.0584	-.0123	-.2749	-.3631				
.175	-.0584	-.0123	-.1617	-.1718				
.200	-.0584	-.0123	-.1914	-.1634				
.225	-.0584	-.0123	-.0516	-.2554				
.250	-.0584	-.0123	-.253	-.9787				
.275	-.0584	-.0123	-.2825	-.9756				
.300	-.0584	-.0123	-.0531	-.9352				

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7082

ALPHA (5)	=	11.959	BETA (3)	=	4.256	MACH	=	1.0980	Q	=	599.15	P	=	710.01	RNL	=	3.1917
SECTION 1 (INVERTICAL)																	
DEPENDENT VARIABLE CP																	
X/CV																	
.230	.6394	.2632	.2061	.0743	.0352												
.225	-.0162	-.4657	-.6106	-.7477	-.8216												
.250	.3910	-.3530	-.6449	-.7449	-.8214												
.150	.2674	-.2148	-.4615	-.4872	-.6184												
.300	-.1532	-.2659	-.3201	-.4423	-.4524												
.520	-.3461	-.3643	-.1977	-.3340	-.3207												
.635	-.5260	-.2316	-.1544	-.0090	-.8455												
.775	-.4422	-.7259	-.9127	-.9518	-.6542												
.920	-.6593	-.7665	-.7024	-.7094	-.5870												

AMES 11-073(OA148) -140A/B/C ORB VERTICAL
(XE8V78)

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7083

AMES 11-073(OA148) -140A/B/C DRB VERTICAL

(XEBV79) (13 AUG 75)

REFERENCE DATA

SREF =	2690.0000 IN.	XMRP =	1076.6800 IN.	XO
LREF =	474.6200 IN.	YMRP =	0000.0000 IN.	YO
BREF =	935.0500 IN.	ZMRP =	375.0000 IN.	ZO
SCALE =	.0300			

ALPHA (1) = -4.051 BETA (1) = -3.840 MACH = .89397 Q = 600.24 P = 1058.8

SECTION (1) VERTICAL

X/CY	.5955	.3703	.4019	.4594	.4100
.326	.3+93	.193+	.2015	.1936	.1196
.363	.3553	.1991	.1841	.1815	.1296
.350	.1855	.0395	.0947	.0733	.0327
.350	.1753	.0052	.0010	.0370	.1136
.382	.186+	.2127	.0643	.2201	.2753
.385	.3571	.9329	.1392	.5076	.4789
.765	.2+92	.4525	.6950	.4843	.3269
.953	.2292	.5728	.5448	.3271	.3134
					.2636
ALPHA (1) = -4.055	BET(A + 2) =	.202	MACH = .89997	Q = 600.24	P = 1058.8
SECTION (1) VERTICAL			DEPENDENT VARIABLE CP		
Z, R,	.1580	.3170	.4590	.6020	.6970
* 1.000	.5673	.4699	.4970	.4654	.4315
.2180	.0255	.3222	.4725	.5311	.6350
.1583	.1539	.1043	.1527	.2020	.4853
.1615	.0222	.0573	.1279	.1390	.1241
.1615	.1742	.1613	.1497	.1534	.2195
.1615	.1742	.1712	.0392	.2978	.2755
.1615	.1812	.1812	.1442	.2990	.2872
.1615	.1812	.1805	.1551	.3855	.2531
.1615	.2636	.2636	.6833	.2600	.2250
.1615	.2636	.2636	.5976	.3616	.2479

ALPHA (1) = -4.055 BET(A + 2) = .202 MACH = .89997 Q = 600.24 P = 1058.8

SECTION (1) VERTICAL

X/CY	.5955	.3703	.4019	.4594	.4100
.326	.3+93	.193+	.2015	.1936	.1196
.363	.3553	.1991	.1841	.1815	.1296
.350	.1855	.0395	.0947	.0733	.0327
.350	.1753	.0052	.0010	.0370	.1136
.382	.186+	.2127	.0643	.2201	.2753
.385	.3571	.9329	.1392	.5076	.4789
.765	.2+92	.4525	.6950	.4843	.3269
.953	.2292	.5728	.5448	.3271	.3134
					.2636
ALPHA (1) = -4.055	BET(A + 2) = .202	MACH = .89997	Q = 600.24	P = 1058.8	RNL = 3.5827
SECTION (1) VERTICAL		DEPENDENT VARIABLE CP			
Z, R,	.1580	.3170	.4590	.6020	.6970
* 1.000	.5673	.4699	.4970	.4654	.4315
.2180	.0255	.3222	.4725	.5311	.6350
.1583	.1539	.1043	.1527	.2020	.4853
.1615	.0222	.0573	.1279	.1390	.1241
.1615	.1742	.1613	.1497	.1534	.2195
.1615	.1742	.1712	.0392	.2978	.2755
.1615	.1812	.1812	.1442	.2990	.2872
.1615	.1812	.1805	.1551	.3855	.2531
.1615	.2636	.2636	.6833	.2600	.2250
.1615	.2636	.2636	.5976	.3616	.2479

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故曰：「人情有所不能忍者，匹夫见辱，挺身而斗，此不足為勇也。天下有大勇者，卒然臨之而不惊，无故加之而不怒。此其所挾持甚大，其志甚远也。」

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TABLE A7.3.3.3E PERIODIC DATA - CA148 / AMES II-073-1

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ANSWER: $(1 - \frac{1}{3}(0.4)(48)) = 1400/8/3$ CBB VERBAL

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TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

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$\alpha_{OA} = -0.053$		$\beta_{OA} = -0.029$	$\alpha_{OB} = -0.053$	$\beta_{OB} = -0.029$	AMES 11-073(OA148) -140A/B/C		CRB VERTICAL	(XEBV80)	
SECTION (1) VERTICAL		SECTION (2) VERTICAL		SECTION (3) VERTICAL		DEPENDENT VARIABLE CP		P = 2386.5	RNL = 4.8222
Z 3,	.1580	.3170	.4590	.6020	.6370	.8390	.9250		
X/CY									
.026	.0355	-.18+2		-.1076		.1010	.0110		
.025	.3913	.3295		.3559		.3123	.2955		
.025	.3427	.2974		.2883		.2677	.2485		
.160	.1675	.1485		.1426		.1191	.0866		
.160	.0517	.0390		.0015		-.0135	-.0507		
.160	-.1250	-.2701		-.1278		-.2630	-.2345		
.165	-.2630	-.5275	-.1401	-.6304	-.7287	-.5842	-.3659		
.165	-.2479	-.3178	-.3051	-.3647	-.5729	-.3308	-.2082		
.165	-.2157	-.2157	-.1795	-.1436	-.1583	-.1169	-.0958		
A-B-4 (2) = -0.026	BETA (2) = -3.854	MACH = -3.854						P = 2386.5	RNL = 4.8222
SECTION (1) VERTICAL									
Z 3,	.1580	.3170	.4590	.6020	.6370	.8390	.9250		
X/CY									
.026	.7422	.2529		.2953		.3927	.3720		
.025	.2262	.1159		.1145		.0724	.0057		
.025	.2063	.1154		.0993		.0635	.0433		
.025	.0285	.0193		-.0551		-.0237	-.0318		
.025	-.0285	-.0193		-.1223		-.1176	-.1238		
.025	-.1620	-.3355		-.1789		-.3156	-.2633		
.025	-.1620	-.5325	-.1496	-.6720	-.7654	-.5964	-.3600		
.025	-.1611	-.5312	-.3467	-.3772	-.6147	-.4029	-.2222		
.025	-.1628	-.3192	-.2055	-.1751	-.1340	-.1763	-.0980		
A-B-2 (2) = -0.023	BETA (3) = -1.76	MACH = -1.76						P = 2386.5	RNL = 4.8222
SECTION (1) VERTICAL									
Z 3,	.1580	.3170	.4590	.6020	.6370	.8390	.9250		
X/CY									
.025	-.4342	.3713		.3772		.2992	.2805		
.025	-.1366	-.625		-.6117		-.4592	-.8133		
.025	-.0125	-.1223		-.2512		-.2923	-.3393		
.150	-.1520	-.1664		-.1590		-.2244	-.1978		
.150	-.1520	-.2021		-.2434		-.2263	-.2139		
.150	-.1520	-.2021		-.2927		-.3497	-.2686		
.150	-.2648	-.5151	-.1463	-.5626	-.6618	-.4914	-.3583		
.150	-.2648	-.5151	-.4361	-.4768	-.5955	-.4013	-.2402		
.150	-.2648	-.5151	-.1635	-.1348	-.3259	-.2473	-.1464		

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H-15 11-U-310414B) -140H/B/C UMB VERTICAL
RNL = 2386.5 P = 59.33

INDEPENDENT VARIABLE C: PRACTICAL

9250 9250 9250 9250 9250

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$$P = \frac{RNL}{RN/L} = 4.0822$$

INTRODUCTION AND METHODS

1. 3. 2. 4.
1. 2. 3. 4.
1. 2. 3. 4.
1. 2. 3. 4.
1. 2. 3. 4.

- .9825	- .973	- .9738
- .9831	- .974	- .9746
- .9837	- .9745	- .9754
- .9843	- .975	- .9764
- .9849	- .9755	- .9774
- .9855	- .976	- .9784
- .9861	- .9765	- .9794
- .9867	- .977	- .9804
- .9873	- .9775	- .9814
- .9879	- .978	- .9824
- .9885	- .9785	- .9834
- .9891	- .979	- .9844
- .9897	- .9795	- .9854
- .9903	- .98	- .9864
- .9909	- .9805	- .9874
- .9915	- .981	- .9884
- .9921	- .9815	- .9894
- .9927	- .982	- .9904
- .9933	- .9825	- .9914
- .9939	- .983	- .9924
- .9945	- .9835	- .9934
- .9951	- .984	- .9944
- .9957	- .9845	- .9954
- .9963	- .985	- .9964
- .9969	- .9855	- .9974
- .9975	- .986	- .9984
- .9981	- .9865	- .9994
- .9987	- .987	- .9999

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CEPTEMENT VARIABLE CP

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וְעַתָּה
יְמִינֵךְ
בְּנֵי
יִשְׂרָאֵל
וְעַתָּה
יְמִינֵךְ
בְּנֵי
יִשְׂרָאֵל

Opportunities for the application of the technique are discussed.

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S : 1-073(0148) -1400/B/C 088 VERT

EX-8803

BN/1 5 886 5 4-8207

SECTION		DEPENDENT VARIABLE CP		SECTION		DEPENDENT VARIABLE CP	
ITEM	COEFFICIENT	ITEM	COEFFICIENT	ITEM	COEFFICIENT	ITEM	COEFFICIENT
1.0	.3170	4.0	.4590	8.0	.6020	12.0	.6970
2.0	.4590	5.0	.4590	9.0	.6020	13.0	.6970
3.0	.3170	6.0	.4590	10.0	.6020	14.0	.6970
4.0	.4590	7.0	.4590	11.0	.6020	15.0	.6970
5.0	.3170	8.0	.4590	12.0	.6020	16.0	.6970
6.0	.4590	9.0	.4590	13.0	.6020	17.0	.6970
7.0	.3170	10.0	.4590	14.0	.6020	18.0	.6970
8.0	.4590	11.0	.4590	15.0	.6020	19.0	.6970
9.0	.3170	12.0	.4590	16.0	.6020	20.0	.6970
10.0	.4590	13.0	.4590	17.0	.6020	21.0	.6970
11.0	.3170	14.0	.4590	18.0	.6020	22.0	.6970
12.0	.4590	15.0	.4590	19.0	.6020	23.0	.6970
13.0	.3170	16.0	.4590	20.0	.6020	24.0	.6970
14.0	.4590	17.0	.4590	21.0	.6020	25.0	.6970
15.0	.3170	18.0	.4590	22.0	.6020	26.0	.6970
16.0	.4590	19.0	.4590	23.0	.6020	27.0	.6970
17.0	.3170	20.0	.4590	24.0	.6020	28.0	.6970
18.0	.4590	21.0	.4590	25.0	.6020	29.0	.6970
19.0	.3170	22.0	.4590	26.0	.6020	30.0	.6970
20.0	.4590	23.0	.4590	27.0	.6020	31.0	.6970
21.0	.3170	24.0	.4590	28.0	.6020	32.0	.6970
22.0	.4590	25.0	.4590	29.0	.6020	33.0	.6970
23.0	.3170	26.0	.4590	30.0	.6020	34.0	.6970
24.0	.4590	27.0	.4590	31.0	.6020	35.0	.6970
25.0	.3170	28.0	.4590	32.0	.6020	36.0	.6970
26.0	.4590	29.0	.4590	33.0	.6020	37.0	.6970
27.0	.3170	30.0	.4590	34.0	.6020	38.0	.6970
28.0	.4590	31.0	.4590	35.0	.6020	39.0	.6970
29.0	.3170	32.0	.4590	36.0	.6020	40.0	.6970
30.0	.4590	33.0	.4590	37.0	.6020	41.0	.6970
31.0	.3170	34.0	.4590	38.0	.6020	42.0	.6970
32.0	.4590	35.0	.4590	39.0	.6020	43.0	.6970
33.0	.3170	36.0	.4590	40.0	.6020	44.0	.6970
34.0	.4590	37.0	.4590	41.0	.6020	45.0	.6970
35.0	.3170	38.0	.4590	42.0	.6020	46.0	.6970
36.0	.4590	39.0	.4590	43.0	.6020	47.0	.6970
37.0	.3170	40.0	.4590	44.0	.6020	48.0	.6970
38.0	.4590	41.0	.4590	45.0	.6020	49.0	.6970
39.0	.3170	42.0	.4590	46.0	.6020	50.0	.6970
40.0	.4590	43.0	.4590	47.0	.6020	51.0	.6970
41.0	.3170	44.0	.4590	48.0	.6020	52.0	.6970
42.0	.4590	45.0	.4590	49.0	.6020	53.0	.6970
43.0	.3170	46.0	.4590	50.0	.6020	54.0	.6970
44.0	.4590	47.0	.4590	51.0	.6020	55.0	.6970
45.0	.3170	48.0	.4590	52.0	.6020	56.0	.6970
46.0	.4590	49.0	.4590	53.0	.6020	57.0	.6970
47.0	.3170	50.0	.4590	54.0	.6020	58.0	.6970
48.0	.4590	51.0	.4590	55.0	.6020	59.0	.6970
49.0	.3170	52.0	.4590	56.0	.6020	60.0	.6970
50.0	.4590	53.0	.4590	57.0	.6020	61.0	.6970
51.0	.3170	54.0	.4590	58.0	.6020	62.0	.6970
52.0	.4590	55.0	.4590	59.0	.6020	63.0	.6970
53.0	.3170	56.0	.4590	60.0	.6020	64.0	.6970
54.0	.4590	57.0	.4590	61.0	.6020	65.0	.6970
55.0	.3170	58.0	.4590	62.0	.6020	66.0	.6970
56.0	.4590	59.0	.4590	63.0	.6020	67.0	.6970
57.0	.3170	60.0	.4590	64.0	.6020	68.0	.6970
58.0	.4590	61.0	.4590	65.0	.6020	69.0	.6970
59.0	.3170	62.0	.4590	66.0	.6020	70.0	.6970
60.0	.4590	63.0	.4590	67.0	.6020	71.0	.6970
61.0	.3170	64.0	.4590	68.0	.6020	72.0	.6970
62.0	.4590	65.0	.4590	69.0	.6020	73.0	.6970
63.0	.3170	66.0	.4590	70.0	.6020	74.0	.6970
64.0	.4590	67.0	.4590	71.0	.6020	75.0	.6970
65.0	.3170	68.0	.4590	72.0	.6020	76.0	.6970
66.0	.4590	69.0	.4590	73.0	.6020	77.0	.6970
67.0	.3170	70.0	.4590	74.0	.6020	78.0	.6970
68.0	.4590	71.0	.4590	75.0	.6020	79.0	.6970
69.0	.3170	72.0	.4590	76.0	.6020	80.0	.6970
70.0	.4590	73.0	.4590	77.0	.6020	81.0	.6970
71.0	.3170	74.0	.4590	78.0	.6020	82.0	.6970
72.0	.4590	75.0	.4590	79.0	.6020	83.0	.6970
73.0	.3170	76.0	.4590	80.0	.6020	84.0	.6970
74.0	.4590	77.0	.4590	81.0	.6020	85.0	.6970
75.0	.3170	78.0	.4590	82.0	.6020	86.0	.6970
76.0	.4590	79.0	.4590	83.0	.6020	87.0	.6970
77.0	.3170	80.0	.4590	84.0	.6020	88.0	.6970
78.0	.4590	81.0	.4590	85.0	.6020	89.0	.6970
79.0	.3170	82.0	.4590	86.0	.6020	90.0	.6970
80.0	.4590	83.0	.4590	87.0	.6020	91.0	.6970
81.0	.3170	84.0	.4590	88.0	.6020	92.0	.6970
82.0	.4590	85.0	.4590	89.0	.6020	93.0	.6970
83.0	.3170	86.0	.4590	90.0	.6020	94.0	.6970
84.0	.4590	87.0	.4590	91.0	.6020	95.0	.6970
85.0	.3170	88.0	.4590	92.0	.6020	96.0	.6970
86.0	.4590	89.0	.4590	93.0	.6020	97.0	.6970
87.0	.3170	90.0	.4590	94.0	.6020	98.0	.6970
88.0	.4590	91.0	.4590	95.0	.6020	99.0	.6970
89.0	.3170	92.0	.4590	96.0	.6020	100.0	.6970
90.0	.4590	93.0	.4590	97.0	.6020		

$\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

AMES 11-073(0A148) -14GA/B/C ORB VERTICAL

(XEBV80)

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

REF A	REF B	REF C	REF D	REF E	REF F	REF G	REF H	REF I	REF J	REF K	REF L	REF M	REF N	REF O	REF P	REF Q	REF R	REF S	REF T	REF U	REF V	REF W	REF X	REF Y	REF Z	
.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590	.4590

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

 $\alpha = 0^\circ$ $\beta = +.025^\circ$ $\gamma = .025^\circ$ $\text{BETA} = 5^\circ$ $M = 8.275$ $\text{MACH} = .59628$ $0 = 593.97$ $P = 2386.5$ $R/N/L = 4.8207$

DEPENDENT VARIABLE CP

CALCULATED PRESSURE DATA - CA148 (AMES 11-073-1)

AMES 11-073(CA148) -140A/B/C CRB VERTICAL
 $\beta = 12.027$ $\beta_{\text{TA}} = 4.242$ $MACH = .52550$ $O = 594.19$ $P = 2385.7$ $RN/L = 4.8199$
 DEPENDENT VARIABLE CP

$\beta = 12.027$ $\beta_{\text{TA}} = 4.242$ $MACH = .52550$ $O = 594.19$ $P = 2385.7$ $RN/L = 4.8199$
 DEPENDENT VARIABLE CP

$\beta = 12.027$ $\beta_{\text{TA}} = 4.242$ $MACH = .52550$ $O = 594.19$ $P = 2385.7$ $RN/L = 4.8199$
 DEPENDENT VARIABLE CP

DATE 11-AUG-75

REGULATED PRESSURE DATA - OA148 (AMES 11-073-1)

AMES 11-073(OA148) -140A/B/r ORB VERTICAL

PAGE 7102

(XEBVB2) (13 AUG 75)

REFERENCE DATA

ZERO	1076.0000	IN. X0
YZERO	.0000	IN. Y0
ZZERO	375.0000	IN. Z0

A _B	.001	=	BETA (1) =	.172	MACH =	1.2466	O =	=	600.03	P =	551.58	RNL =	3.0277
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SECTION : 1-1 VERTICAL

A _B	.1691	=	BETA (1) =	.4590	.6020	.6970	.8390	.9250
----------------	-------	---	--------------	-------	-------	-------	-------	-------

DEPENDENT VARIABLE CP

1	1.0000	.7030	.6780	.6422	.5739
2	.9214	.6521	.6053	-.0752	-.1301
3	.8358	.5858	.6066	-.0534	-.0687
4	.7515	.5215	.1850	-.1574	.1594
5	.6702	.4612	.1416	.1657	.1534
6	.5913	.4013	.1135	.0570	.0555
7	.5149	.3419	.1156	.1588	-.4575
8	.4413	.2813	.1862	.1244	-.3895
9	.3700	.2300	.1202	.1532	-.2457
10	.3006	.1606	.1236	.1551	-.2974

A _B	.0	=	BETA (1) =	.171	MACH =	1.2457	O =	=	599.87	P =	552.28	RNL =	3.0295
----------------	----	---	--------------	------	--------	--------	-----	---	--------	-----	--------	-------	--------

SECTION : 1-1 VERTICAL

A _B	.1691	=	BETA (1) =	.4590	.6020	.6970	.8390	.9250
----------------	-------	---	--------------	-------	-------	-------	-------	-------

DEPENDENT VARIABLE CP

1	1.0000	.7030	.6780	.5458	.4632
2	.9214	.6521	.6053	-.0936	-.1876
3	.8358	.5858	.6259	-.1021	-.1259
4	.7515	.5215	.1823	-.1097	.0975
5	.6702	.4612	.1763	.0963	.0932
6	.5913	.4013	.1655	.0063	.0092
7	.5149	.3419	.1191	-.2015	-.0963
8	.4413	.2813	.2355	-.2013	-.4330
9	.3700	.2300	.1870	-.2073	-.2832
10	.3006	.1606	.2534	-.2073	-.3631

1

DATE 14 FEB 76

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7103

NUMBER	31 =	3.910	BETA (1) =	-3.890	MACH =	1.2454	O =	599.82	P =	552.51	RNL =	3.0275
SECTION (1) VERTICAL												
DEPENDENT VARIABLE CP												
A/CY												
.220												
.225												
.226												
.2268												
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LINE 14 FIG. 3 75

REGULATED PRESSURE DATA - 04148 (AMES 11-073-1)

PAGE 7104

ρ_{air} = 7.875 $\beta_{\text{TA}} (1) = .170$ MACH = 1.2457 0 = 599.87 P = 552.28 RNL = 3.0295
 SECTION 1: INERTIAL
 $\beta_{\text{TA}} (1) = .1690$.3170 .4530 .6020 .6970 .8390 .9250

AMES 11-073(0A148) -140A/B/C ORB VERTICAL

(XEV892)

SECTION 1: INERTIAL
 $\beta_{\text{TA}} (1) = .1690$.3170 .4530 .6020 .6970 .8390 .9250
 DEPENDENT VARIABLE CP

.5225	.7032	.4950	.4184	.3498	.2728
.226	.1794	.0293	.1630	.1811	.2356
.050	.3400	.1559	.1333	.1809	.1853
.130	.6481	.1579	.0147	.0162	.0230
.200	.1503	.1579	.0379	.0230	.0239
.270	.1162	.1563	.1954	.0952	.0865
.340	.1561	.1561	.1421	.2666	.2639
.410	.1561	.1561	.3071	.2741	.2555
.480	.1561	.1561	.3390	.2637	.2741
.550	.1561	.1561			
.620	.1162	.1563			
.690	.1561	.1561			
.760	.1561	.1561			
.830	.1561	.1561			
.900	.1561	.1561			
.970	.1561	.1561			

SECTION 1: INERTIAL
 $\beta_{\text{TA}} (1) = .1693$ $\beta_{\text{TA}} (1) = .3852$ MACH = 1.2456 0 = 600.06 P = 552.51 RNL = 3.0278
 SECTION 1: INERTIAL
 $\beta_{\text{TA}} (1) = .1690$.3170 .4530 .6020 .6970 .8390 .9250
 DEPENDENT VARIABLE CP

.5225	.7032	.4950	.3120	.2557	.2420
.226	.1794	.0293	.1376	.1536	.1582
.050	.3400	.1559	.1262	.1465	.1569
.130	.6481	.1579	.1271	.0975	.0697
.200	.1503	.1579	.0319	.0752	.0265
.270	.1162	.1563	.2113	.2554	.0654
.340	.1561	.1561	.1793	.1797	.2452
.410	.1561	.1561	.2239	.1855	.4872
.480	.1561	.1561	.2163	.2059	.4462
.550	.1561	.1561	.2574	.2562	.4343
.620	.1162	.1563			
.690	.1561	.1561			
.760	.1561	.1561			
.830	.1561	.1561			
.900	.1561	.1561			
.970	.1561	.1561			

SECTION 1: INERTIAL
 $\beta_{\text{TA}} (1) = .1691$.3170 .4530 .6020 .6970 .8390 .9250
 DEPENDENT VARIABLE CP

.5225	.7032	.4950	.3502	.2706	.2058
.226	.1794	.0293	.1998	.2131	.2701
.050	.3400	.1559	.1756	.2195	.2168
.130	.6481	.1579	.0597	.0567	.0681
.200	.1503	.1579	.0541	.0725	.0741
.270	.1162	.1563	.0285	.1243	.1284
.340	.1561	.1561	.1499	.2975	.2395
.410	.1561	.1561	.3323	.2890	.5292
.480	.1561	.1561	.3672	.2974	.5186
.550	.1561	.1561	.3640	.3053	.4861
.620	.1162	.1563			
.690	.1561	.1561			
.760	.1561	.1561			
.830	.1561	.1561			
.900	.1561	.1561			
.970	.1561	.1561			

DATE 10-18-75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7107

ΔEES 11-073.0A:481 MACH = 1.0981 Q = 598.75 P = 709.30 RN/L = 3.1983

DEPENDENT VARIABLE CP

β_{EES}	.1580	.3170	.4590	.6020	.6970	.8390	.9250
1.000	.5222	.4455	.3958	.3896	.3399		
1.010	.3651	.2593	.2167	.2781	.2631		
1.020	.3834	.2693	.2309	.2694	.2491		
1.030	.2737	.1861	.1789	.1891	.1515		
1.040	.1858	.1261	.1218	.1359	.0278		
1.050	.1672	.1026	.0168	.0539	.0721		
1.060	.1375	.1033	.1034	.2259	.2421		
1.070	.1241	.1246	.1175	.1346	.1716		
1.080	.10616	.1799	.1392	.1469	.4969		
1.090	.1580	.3170	.4590	.6020	.6970	.8390	.9250

ΔEES 11-073.0A:481 MACH = 1.0981 Q = 598.75 P = 709.30 RN/L = 3.1983

DEPENDENT VARIABLE CP

β_{EES}	.1580	.3170	.4590	.6020	.6970	.8390	.9250								
1.000	.5222	.4455	.3958	.4584	.4083	.3234									
1.010	.3651	.2593	.2167	.2143	.2293	.2887									
1.020	.3834	.2693	.2309	.3961	.1954	.2261									
1.030	.2737	.1861	.1789	.2233	.0315	.0502									
1.040	.1858	.1261	.1218	.3615	.0262	.0185									
1.050	.1672	.1026	.0168	.0509	.1128	.1184									
1.060	.1375	.1033	.1034	.3591	.3106	.5508									
1.070	.1241	.1246	.1175	.3622	.2707	.5004									
1.080	.10616	.1799	.1392	.2121	.2313	.3368	.4933	1.090	.1580	.3170	.4590	.6020	.6970	.8390	.9250
1.090	.1580	.3170	.4590	.6020	.6970	.8390	.9250								

ΔEES 11-073.0A:481 MACH = 1.0981 Q = 598.75 P = 709.30 RN/L = 3.1983

DEPENDENT VARIABLE CP

β_{EES}	.1580	.3170	.4590	.6020	.6970	.8390	.9250								
1.000	.5222	.4455	.3958	.3559	.21	.1709									
1.010	.3651	.2593	.2167	.5590	.8062	.8502									
1.020	.3834	.2693	.2309	.6239	.7914	.8345									
1.030	.2737	.1861	.1789	.5227	.5071	.5195									
1.040	.1858	.1261	.1218	.3885	.2721	.2725									
1.050	.1672	.1026	.0168	.3299	.2522	.2314									
1.060	.1375	.1033	.1034	.4544	.4935	.6707									
1.070	.1241	.1246	.1175	.4777	.4345	.4372									
1.080	.10616	.1799	.1392	.3301	.4522	.5220	.5225	1.090	.1580	.3170	.4590	.6020	.6970	.8390	.9250
1.090	.1580	.3170	.4590	.6020	.6970	.8390	.9250								

DATE 11-07-75

TABULATED PRESSURE DATA - OA148 (AMES 11-073-1)

PAGE 7108

		AMES 11-073(OA148)		-14CA/B/C		ORB VERTICAL		(XEBVB3)		
SIN(2* β) = 0.923		$\beta\text{ETA} \quad (1) = .173$		MACH = 1.0972		0 = 598.87		P = 710.71		RNL = 3.1996
SIN(2* β) = 0.940		$\beta\text{ETA} \quad (1) = .4590$		.6020		.6970		.8390		.9250
A/C										
1	.6654	.4350	.3715	.3063	.2115	-.3014	-.3616			
2	.6655	.4344	.2895	.2922	-.3034					
3	.6656	.4339	.1984	.1027	-.0939					
4	.6657	.4333	.1044							
5	.6658	.4312	.1213	.0884	-.1068					
6	.6659	.4310								
7	.6660	.4295	.1531	.1674	-.1424					
8	.6661	.4287	.3961	.3813	.3295	-.6427				
9	.6662	.4283	.4208	.3545	.2873	-.3077	-.5945			
10	.6663	.4275								
11	.6664	.4268	.2078	.2600	.2515	-.3964	-.5218			
12	.6665	.4262								
13	$\beta\text{ETA} \quad (1) = -3.655$		MACH = 1.0958							
14	SIN(2* β) = 0.955		DEPENDENT VARIABLE CP		0 = 598.64		P = 710.95		RNL = 3.1978	
15	SIN(2* β) = 0.960		$\beta\text{ETA} \quad (1) = .4590$		.6020		.6970		.8390	
16	SIN(2* β) = 0.965		$\beta\text{ETA} \quad (1) = .173$		.4590		.3063		.2115	
17	SIN(2* β) = 0.970		$\beta\text{ETA} \quad (1) = .4590$		.3715		.3014		.3616	
18	SIN(2* β) = 0.975		$\beta\text{ETA} \quad (1) = .173$		.2895		.2922		.3034	
19	SIN(2* β) = 0.980		$\beta\text{ETA} \quad (1) = .4590$		.1984		.1027		.0939	
20	SIN(2* β) = 0.985		$\beta\text{ETA} \quad (1) = .173$		.1044					
21	SIN(2* β) = 0.990		$\beta\text{ETA} \quad (1) = .4590$		.1213		.0884		.1068	
22	SIN(2* β) = 0.995		$\beta\text{ETA} \quad (1) = .173$		.1531		.1674		.1424	
23	$\beta\text{ETA} \quad (1) = 11.955$		$\beta\text{ETA} \quad (1) = -3.655$		MACH = 1.0958		0 = 598.64		P = 710.95	
24	SIN(2* β) = 11.960		$\beta\text{ETA} \quad (1) = .4590$		.6020		.6970		.8390	
25	SIN(2* β) = 11.965		$\beta\text{ETA} \quad (1) = .173$		.3715		.3014		.3616	
26	SIN(2* β) = 11.970		$\beta\text{ETA} \quad (1) = .4590$		.2895		.2922		.3034	
27	SIN(2* β) = 11.975		$\beta\text{ETA} \quad (1) = .173$		.1984		.1027		.0939	
28	SIN(2* β) = 11.980		$\beta\text{ETA} \quad (1) = .4590$		.1044		.0884		.1068	
29	SIN(2* β) = 11.985		$\beta\text{ETA} \quad (1) = .173$		.1213		.1674		.1424	
30	SIN(2* β) = 11.990		$\beta\text{ETA} \quad (1) = .4590$		.1531		.1674		.1424	
31	SIN(2* β) = 11.995		$\beta\text{ETA} \quad (1) = .173$		.2895		.2922		.3034	
32	SIN(2* β) = 12.000		$\beta\text{ETA} \quad (1) = .4590$		.1984		.1027		.0939	
33	SIN(2* β) = 12.005		$\beta\text{ETA} \quad (1) = .173$		.1044		.0884		.1068	
34	SIN(2* β) = 12.010		$\beta\text{ETA} \quad (1) = .4590$		.1213		.1674		.1424	
35	SIN(2* β) = 12.015		$\beta\text{ETA} \quad (1) = .173$		.1531		.1674		.1424	
36	SIN(2* β) = 12.020		$\beta\text{ETA} \quad (1) = .4590$		.2895		.2922		.3034	
37	SIN(2* β) = 12.025		$\beta\text{ETA} \quad (1) = .173$		.1984		.1027		.0939	
38	SIN(2* β) = 12.030		$\beta\text{ETA} \quad (1) = .4590$		.1044		.0884		.1068	
39	SIN(2* β) = 12.035		$\beta\text{ETA} \quad (1) = .173$		.1213		.1674		.1424	
40	SIN(2* β) = 12.040		$\beta\text{ETA} \quad (1) = .4590$		.1531		.1674		.1424	
41	SIN(2* β) = 12.045		$\beta\text{ETA} \quad (1) = .173$		.2895		.2922		.3034	
42	SIN(2* β) = 12.050		$\beta\text{ETA} \quad (1) = .4590$		.1984		.1027		.0939	
43	SIN(2* β) = 12.055		$\beta\text{ETA} \quad (1) = .173$		.1044		.0884		.1068	
44	SIN(2* β) = 12.060		$\beta\text{ETA} \quad (1) = .4590$		.1213		.1674		.1424	
45	SIN(2* β) = 12.065		$\beta\text{ETA} \quad (1) = .173$		.1531		.1674		.1424	
46	SIN(2* β) = 12.070		$\beta\text{ETA} \quad (1) = .4590$		.2895		.2922		.3034	
47	SIN(2* β) = 12.075		$\beta\text{ETA} \quad (1) = .173$		.1984		.1027		.0939	
48	SIN(2* β) = 12.080		$\beta\text{ETA} \quad (1) = .4590$		.1044		.0884		.1068	
49	SIN(2* β) = 12.085		$\beta\text{ETA} \quad (1) = .173$		.1213		.1674		.1424	
50	SIN(2* β) = 12.090		$\beta\text{ETA} \quad (1) = .4590$		.1531		.1674		.1424	
51	SIN(2* β) = 12.095		$\beta\text{ETA} \quad (1) = .173$		.2895		.2922		.3034	
52	SIN(2* β) = 12.100		$\beta\text{ETA} \quad (1) = .4590$		.1984		.1027		.0939	
53	SIN(2* β) = 12.105		$\beta\text{ETA} \quad (1) = .173$		.1044		.0884		.1068	
54	SIN(2* β) = 12.110		$\beta\text{ETA} \quad (1) = .4590$		.1213		.1674		.1424	
55	SIN(2* β) = 12.115		$\beta\text{ETA} \quad (1) = .173$		.1531		.1674		.1424	
56	SIN(2* β) = 12.120		$\beta\text{ETA} \quad (1) = .4590$		.2895		.2922		.3034	
57	SIN(2* β) = 12.125		$\beta\text{ETA} \quad (1) = .173$		.1984		.1027		.0939	
58	SIN(2* β) = 12.130		$\beta\text{ETA} \quad (1) = .4590$		.1044		.0884		.1068	
59	SIN(2* β) = 12.135		$\beta\text{ETA} \quad (1) = .173$		.1213		.1674		.1424	
60	SIN(2* β) = 12.140		$\beta\text{ETA} \quad (1) = .4590$		.1531		.1674		.1424	
61										

AMES 11-073(OA148) -140A/B/C ORB VERTICAL

MACH = .251 MACH = 1.0968 Q = 598.64 P = 710.95 RN/L = 3.1978

PREDICTED VARIABLE CP

Y	PREDICTED	PREDICTED	PREDICTED	PREDICTED
.000	.4630	.5170	.5020	.5370
.005	.4635	.5175	.5025	.5390
.010	.4640	.5180	.5030	.5400
.015	.4645	.5185	.5035	.5410
.020	.4650	.5190	.5040	.5420
.025	.4655	.5195	.5045	.5430
.030	.4660	.5200	.5050	.5440
.035	.4665	.5205	.5055	.5450
.040	.4670	.5210	.5060	.5460
.045	.4675	.5215	.5065	.5470
.050	.4680	.5220	.5070	.5480
.055	.4685	.5225	.5075	.5490
.060	.4690	.5230	.5080	.5500
.065	.4695	.5235	.5085	.5510
.070	.4700	.5240	.5090	.5520
.075	.4705	.5245	.5095	.5530
.080	.4710	.5250	.5100	.5540
.085	.4715	.5255	.5105	.5550
.090	.4720	.5260	.5110	.5560
.095	.4725	.5265	.5115	.5570
.100	.4730	.5270	.5120	.5580
.105	.4735	.5275	.5125	.5590
.110	.4740	.5280	.5130	.5600
.115	.4745	.5285	.5135	.5610
.120	.4750	.5290	.5140	.5620
.125	.4755	.5295	.5145	.5630
.130	.4760	.5300	.5150	.5640
.135	.4765	.5305	.5155	.5650
.140	.4770	.5310	.5160	.5660
.145	.4775	.5315	.5165	.5670
.150	.4780	.5320	.5170	.5680
.155	.4785	.5325	.5175	.5690
.160	.4790	.5330	.5180	.5700
.165	.4795	.5335	.5185	.5710
.170	.4800	.5340	.5190	.5720
.175	.4805	.5345	.5195	.5730
.180	.4810	.5350	.5200	.5740
.185	.4815	.5355	.5205	.5750
.190	.4820	.5360	.5210	.5760
.195	.4825	.5365	.5215	.5770
.200	.4830	.5370	.5220	.5780
.205	.4835	.5375	.5225	.5790
.210	.4840	.5380	.5230	.5800
.215	.4845	.5385	.5235	.5810
.220	.4850	.5390	.5240	.5820
.225	.4855	.5395	.5245	.5830
.230	.4860	.5400	.5250	.5840
.235	.4865	.5405	.5255	.5850
.240	.4870	.5410	.5260	.5860
.245	.4875	.5415	.5265	.5870
.250	.4880	.5420	.5270	.5880
.255	.4885	.5425	.5275	.5890
.260	.4890	.5430	.5280	.5900
.265	.4895	.5435	.5285	.5910
.270	.4900	.5440	.5290	.5920
.275	.4905	.5445	.5295	.5930
.280	.4910	.5450	.5300	.5940
.285	.4915	.5455	.5305	.5950
.290	.4920	.5460	.5310	.5960
.295	.4925	.5465	.5315	.5970
.300	.4930	.5470	.5320	.5980
.305	.4935	.5475	.5325	.5990
.310	.4940	.5480	.5330	.6000
.315	.4945	.5485	.5335	.6010
.320	.4950	.5490	.5340	.6020
.325	.4955	.5495	.5345	.6030
.330	.4960	.5500	.5350	.6040
.335	.4965	.5505	.5355	.6050
.340	.4970	.5510	.5360	.6060
.345	.4975	.5515	.5365	.6070
.350	.4980	.5520	.5370	.6080
.355	.4985	.5525	.5375	.6090
.360	.4990	.5530	.5380	.6100
.365	.4995	.5535	.5385	.6110
.370	.5000	.5540	.5390	.6120
.375	.5005	.5545	.5395	.6130
.380	.5010	.5550	.5400	.6140
.385	.5015	.5555	.5405	.6150
.390	.5020	.5560	.5410	.6160
.395	.5025	.5565	.5415	.6170
.400	.5030	.5570	.5420	.6180
.405	.5035	.5575	.5425	.6190
.410	.5040	.5580	.5430	.6200
.415	.5045	.5585	.5435	.6210
.420	.5050	.5590	.5440	.6220
.425	.5055	.5595	.5445	.6230
.430	.5060	.5600	.5450	.6240
.435	.5065	.5605	.5455	.6250
.440	.5070	.5610	.5460	.6260
.445	.5075	.5615	.5465	.6270
.450	.5080	.5620	.5470	.6280
.455	.5085	.5625	.5475	.6290
.460	.5090	.5630	.5480	.6300
.465	.5095	.5635	.5485	.6310
.470	.5100	.5640	.5490	.6320
.475	.5105	.5645	.5495	.6330
.480	.5110	.5650	.5500	.6340
.485	.5115	.5655	.5505	.6350
.490	.5120	.5660	.5510	.6360
.495	.5125	.5665	.5515	.6370
.500	.5130	.5670	.5520	.6380
.505	.5135	.5675	.5525	.6390
.510	.5140	.5680	.5530	.6400
.515	.5145	.5685	.5535	.6410
.520	.5150	.5690	.5540	.6420
.525	.5155	.5695	.5545	.6430
.530	.5160	.5700	.5550	.6440
.535	.5165	.5705	.5555	.6450
.540	.5170	.5710	.5560	.6460
.545	.5175	.5715	.5565	.6470
.550	.5180	.5720	.5570	.6480
.555	.5185	.5725	.5575	.6490
.560	.5190	.5730	.5580	.6500
.565	.5195	.5735	.5585	.6510
.570	.5200	.5740	.5590	.6520
.575	.5205	.5745	.5595	.6530
.580	.5210	.5750	.5600	.6540
.585	.5215	.5755	.5605	.6550
.590	.5220	.5760	.5610	.6560
.595	.5225	.5765	.5615	.6570
.600	.5230	.5770	.5620	.6580
.605	.5235	.5775	.5625	.6590
.610	.5240	.5780	.5630	.6600
.615	.5245	.5785	.5635	.6610
.620	.5250	.5790	.5640	.6620
.625	.5255	.5795	.5645	.6630
.630	.5260	.5800	.5650	.6640
.635	.5265	.5805	.5655	.6650
.640	.5270	.5810	.5660	.6660
.645	.5275	.5815	.5665	.6670
.650	.5280	.5820	.5670	.6680
.655	.5285	.5825	.5675	.6690
.660	.5290	.5830	.5680	.6700
.665	.5295	.5835	.5685	.6710
.670	.5300	.5840	.5690	.6720
.675	.5305	.5845	.5695	.6730
.680	.5310	.5850	.5700	.6740
.685	.5315	.5855	.5705	.6750
.690	.5320	.5860	.5710	.6760
.695	.5325	.5865	.5715	.6770
.700	.5330	.5870	.5720	.6780
.705	.5335	.5875	.5725	.6790
.710	.5340	.5880	.5730	.6800
.715	.5345	.5885	.5735	.6810
.720	.5350	.5890	.5740	.6820
.725	.5355	.5895	.5745	.6830
.730	.5360	.5900	.5750	.6840
.735	.5365	.5905	.5755	.6850
.740	.5370	.5910	.5760	.6860
.745	.5375	.5915	.5765	.6870
.750	.5380	.5920	.5770	.6880
.755	.5385	.5925	.5775	.6890
.760	.5390	.5930	.5780	.6900
.765	.5395	.5935	.5785	.6910
.770	.5400	.5940	.5790	.6920
.775	.5405	.5945	.5795	.6930
.780	.5410	.5950	.5800	.6940
.785	.5415	.5955	.5805	.6950
.790	.5420	.5960	.5810	.6960
.795	.5425	.5965	.5815	.6970
.800	.5430	.5970	.5820	.6980
.805	.5435	.5975	.5825	.6990
.810	.5440	.5980	.5830	.7000
.815	.5445	.5985	.5835	.7010
.820	.5450	.5990	.5840	.7020
.825	.5455	.5995	.5845	.7030
.830	.5460	.6000	.5850	.7040
.835	.5465	.6005	.5855	.7050
.840	.5470	.6010	.5860	.7060
.845	.5475	.6015	.5865	.7070
.850	.5480	.6020	.5870	.7080
.855	.5485	.6025	.5875	.7090
.860	.5490	.6030	.5880	.7100
.865	.5495	.6035	.5885	.7110
.870	.5500	.6040	.5890	.7120
.875	.5505	.6045	.5895	.7130
.880	.5510	.6050	.5900	.7140
.885	.5515	.6055	.5905	.7150
.890	.5520	.6060	.5910	.7160
.895	.5525	.6065	.5915	.7170
.900	.5530	.6070	.5920	.7180
.905	.5535	.6075	.5925	.7190
.910	.5540	.6080	.5930	.7200
.915	.5545	.6085	.5935	.7210
.920	.5550	.6090	.5940	.7220
.925	.5555	.6095	.5945	.7230
.930	.5560	.6100	.5950	.7240
.935	.5565	.6105	.5955	.7250
.940	.5570	.6110	.5960	.7260
.945	.5575	.6115	.5965	.7270
.950	.5580	.6120	.5970	.7280
.955	.5585	.6125	.5975	.7290
.960	.5590	.6130	.5980	.7300
.965	.5595	.6135	.5985	.7310
.970	.5600	.6140	.5990	.7320
.975	.5605	.6145	.5995	.7330
.980	.5610	.6150	.6000	.7340
.985	.5615	.6155	.6005	.7350
.990	.5620	.6160	.6010	.7360
.995	.5625	.6165	.6015	.7370
.999	.5630	.6170	.6020	.7380

(XEBV83)

ORIGINAL PAGE IS
OF POOR QUALITY

AMES 11-0731CA1481 -140AV/B/C ORB VERTICAL
DEPEN-DENT VARIABLE CP

11-0731CA1481 11-0731CA1481 11-0731CA1481

1XEBV84)

AMES 11-0731CA1481 -140AV/B/C

MACH = .69820 Q = .598.16 P = 1059.3 RNL = 3.5792

DEPEN-DENT VARIABLE CP

P = .9250

RN/L = 3.5769

.3310 -.2539

-.1190 -.1734

-.0338 -.0792

-.0563 -.0556

-.0729 -.1267

-.1173 -.1518

-.2263 -.3442

-.3453 -.3102

-.4612 -.2150

-.5710 -.1970

-.6776 -.0976

-.7732 -.0976

-.8688 -.1326

-.9544 -.1326

-.0403 -.1326

-.1460 -.1326

-.2517 -.1326

-.3574 -.1326

-.4631 -.1326

-.5688 -.1326

-.6745 -.1326

-.7802 -.1326

-.8859 -.1326

-.9916 -.1326

-.0973 -.1326

-.1930 -.1326

-.2987 -.1326

-.3944 -.1326

-.4901 -.1326

-.5958 -.1326

-.6915 -.1326

-.7972 -.1326

-.8929 -.1326

-.9986 -.1326

-.0973 -.1326

-.1930 -.1326

-.2987 -.1326

-.3944 -.1326

-.4901 -.1326

-.5958 -.1326

-.6915 -.1326

-.7972 -.1326

-.8929 -.1326

-.9986 -.1326

-.0973 -.1326

-.1930 -.1326

-.2987 -.1326

-.3944 -.1326

-.4901 -.1326

-.5958 -.1326

-.6915 -.1326

-.7972 -.1326

TRANSLATE, COMPUTE DATA - 04:14:08 (AMES 11-073-1)

AMES 11-073(DAT4B) - 140A/B/C CRB VERTICAL

PAGE 7113

(XEBV85) 113 AUG 75 1

DEPENDENT CP

1.0000	.9998	1.0000	X0
.9998	.9997	.9998	Y0
.9992	.9990	.9992	Z0
1.0000	1.0000	1.0000	1.0000

PARAMETRIC DATA

RUDDER =	10.000	SPCDRK =	-10.000
BDFLAP =	-11.000	L-ELDN =	-10.000
R-FLVN =	10.000	MACH =	.8000

DEPENDENT VARIABLE CP

1.0000	.9998	1.0000	X0
.9998	.9997	.9998	Y0
.9992	.9990	.9992	Z0
1.0000	1.0000	1.0000	1.0000

PARAMETRIC DATA

RUDDER =	10.000	SPCDRK =	-10.000
BDFLAP =	-11.000	L-ELDN =	-10.000
R-FLVN =	10.000	MACH =	.8000

DEPENDENT VARIABLE CP

1.0000	.9998	1.0000	X0
.9998	.9997	.9998	Y0
.9992	.9990	.9992	Z0
1.0000	1.0000	1.0000	1.0000

RN/L = 4.8156
P = 2386.4

RUDDER =	10.000	SPCDRK =	-10.000
BDFLAP =	-11.000	L-ELDN =	-10.000
R-FLVN =	10.000	MACH =	.8000

DEPENDENT VARIABLE CP

1.0000	.9998	1.0000	X0
.9998	.9997	.9998	Y0
.9992	.9990	.9992	Z0
1.0000	1.0000	1.0000	1.0000

RN/L = 4.8288
P = 2387 ;

